ANNUAL RAILROAD SAFETY REPORT TO THE CALIFORNIA STATE LEGISLATURE

Pursuant to California Public Utilities Code Sections 916, 916.1, 916.2, and 916.3

NOVEMBER 30, 2025

FOR FISCAL YEAR 2024-2025

California Public Utilities Commission

Rail Safety Division

Executive Summary

The California Public Utilities Commission (CPUC) submits this Annual Railroad Safety Report for fiscal year (FY) 2024–2025, as required by Public Utilities Code Sections 916–916.3.[1] Those laws require CPUC to report to the Legislature on or before November 30 of each year on its railroad and safety activities and the results of its investigation of certain incidents. Any action undertaken by the Commission in response to those findings, the sites on railroad lines that the Commission finds to be hazardous, and the Commission's determination of the impact on competition, if any, of the regulatory fees assessed on railroad corporations for the support of the Commission's activities. The report covers both mandated safety programs (under state and federal law) and proactive safety initiatives to protect the public and railroad workers.

The CPUC has regulatory authority over rail safety within California. The CPUC's Rail Safety Division (RSD) is responsible for enforcing state and federal laws, regulations, CPUC General Orders (GO), and directives relating to transportation by railroads.[2] Beyond mandated railroad safety activities specifically identified in these authorities, RSD inspectors continuously and proactively identify other potential safety hazards and conduct risk management and reduction work.

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[1] Pub. Util. Code Section 916 requires CPUC to report to the Legislature on its rail safety activities on or by November 30 of each year. In addition, Pub. Util. Code Section 916.3 requires CPUC to report on the actions it has taken to comply with Section 765.5, which requires CPUC to take all appropriate action necessary to ensure the safe operation of railroads in this state. This report chronicles the rail safety activities of CPUC's Rail Safety Division and identifies the proactive efforts CPUC's railroad safety inspectors take to promote the safe operation of railroads during the previous fiscal year.

Pub. Util. Code Section 916.1 requires CPUC to annually report the results of its investigations of runaway trains or other uncontrolled train movements that threaten public health and safety, as per Section 7661. This is included in this report in Chapter III.

Pub. Util. Code Section 916.2 requires CPUC to report to the Legislature on sites on railroad lines in California it finds to be hazardous. The report is to include a list of all derailment accident sites in the state where accidents have occurred within at least the previous five years, and a list of all railroad sites in the state that the Commission has determined to pose a local safety hazard (called Local Safety Hazard Sites [LSHSs]). Section 916.2 permits this report to be combined with the report required by Section 916. The list of derailments is located on the Commission's website at http://www.cpuc.ca.gov/rosb/, and the list of LSHSs, documented by calendar year, is presented in Chapter IV.

Pub. Util. Code Section 916.3 requires CPUC to report annually on the impact on competition, if any, of the regulatory fees assessed railroad corporations for the support of CPUC's activities. This report includes the assessment in Chapter V.

[2] The unit within RSD primarily responsible for this oversight is the Rail Operations and Safety Branch (ROSB).

This Annual Report provides:

• An overview of the CPUC's rail safety activities

• Findings from incident investigations

• Actions taken in response to safety hazards

• Identification of hazardous railroad locations

• An assessment of regulatory fees' impact on competition

• Details of RSD's enforcement of rail safety laws and how it addresses emerging risks

Mandated Rail Safety Inspections and Investigations

• 4,790 inspections conducted for compliance with state/federal laws.

• 16,831 federal defects cited; 1.320 violations referred for penalties.

• 309 state inspections identifying 818 defects, with follow-up enforcement as needed.

Proactive Safety Efforts and Risk Management Activities

• Risk Management Status Reports (RMSRs): Created six new reports to address hazards beyond existing regulations.

• Crude Oil Reconnaissance Team (CORT) Safety Inspections: Monitored large crude oil shipments and inspected transfer facilities for compliance.

• Bridge Safety: Conducted six bridge inspections to assess structural integrity.

• Rail Head Wear Project (RHWP)[3]: Used advanced gauges to track rail head wear in critical areas.

• Positive Train Control (PTC): Ensured PTC systems operated effectively.

• High-Speed Rail (HSR): Monitored implementation progress.

• Heavy Grade Audit Project (HGAP): Assessed risks from train configurations in steep, mountainous terrain.

• Public Complaints: Investigated 17 complaints from railroad employees, unions, and the public.

[3] Rail head refers to the top of the rail which contact the wheels of trains as they travel on the rail. The rail head wears out at different locations along the track depending on the weight of the trains, the grade, and the curvature of the turns.

Investigations of Uncontrolled Train Movements

In FY 2024-2025, RSD investigated one uncontrolled train movement.

Local Safety Hazard Sites

This Report includes a list of the accidents that have occurred at or near a local safety hazard site (LSHS) within the previous five years. Local Safety Hazard Sites are sinuously curved tracks or mountainous areas where degree of track curvature is high. Pub. Util. Code Section 916.2 requires the CPUC to include a list of all railroad derailment accident sites in the state on which accidents have occurred within at least the previous five years, describe the nature and probable causes of the accidents, and indicate whether the accidents occurred at or near sites that the CPUC has determined to be hazardous.[4] Within the previous five calendar years, California experienced 369 derailments. Of that total, 39 derailments, or 10.6 percent, occurred at or near local safety hazard sites.

The 24.9 mile-long LSHS #16 near Tehachapi is one of the most challenging sections of track in California for a locomotive engineer to maneuver through. With only 0.4% of the total track mileage in California, it has had 5.7% of the total derailments in California over the last five years. RSD staff have engaged in proactive safety inspections there by engaging in rail head wear measurements and annual heavy grade audits with the railroads and FRA.

[4] CPUC has been combining the LSHS accident report with its Annual Railroad Safety Report since 2014.

I. Mandated Rail Safety Inspections and Investigations

A. Inspection Process

RSD inspectors perform investigative and surveillance activities to detect instances of non-compliance (commonly called "defects" in FRA and RSD railroad safety-related documents) with both federal and state railroad safety laws and regulations.

Federal: To enforce federal regulations, RSD inspectors are trained and certified by the FRA to perform inspections for compliance with FRA requirements. RSD inspectors operate under the CPUC's Safety Participation Program agreement with the FRA (49 CFR Part 212).

State: The primary California railroad safety laws and regulations enforced by RSD inspectors are CPUC GOs and the Public Utilities Code sections applicable to rail. A list of these laws and regulations is contained in Appendix A. The GOs most frequently cited by RSD are 26-D (Regulations Governing Clearances on Railroads and Street Railroads with Reference to Side and Overhead Structures, Parallel Tracks, Crossings of Public Roads, Highways and Streets), and 118-A (Regulations Governing the Construction, Reconstruction, and Maintenance of Walkways Adjacent to Railroad Trackage and the Control of Vegetation Adjacent Thereto).

GO 26-D establishes minimum standards for overhead and side clearances (i.e., distances) between freight cars and other equipment on railroad tracks on the one hand, and nearby objects on the other, such as switch boxes, signals, parallel tracks, and other rail apparatus; platforms, overhead roads, bridges, buildings, and other structures; and other types of potential obstructions. These standards are necessary to prevent contact between trains and obstructions which could damage both, and to prevent train personnel riding on the sides or tops of trains from being hit by such objects and becoming injured or killed.

GO 118-A requires railroad corporations to provide reasonably safe and adequate walkways adjacent to their tracks in all switching areas, and set standards for walkway slopes and ballasting. These standards are necessary to prevent persons from tripping and falling on uneven walkways, especially in the path of moving trains, possibly causing injury or death.

In general terms, RSD inspectors perform the following steps:

1. After arriving at a site, inspectors record noncomplying conditions at the facility or other railroad location in question, including the location, type, and extent of each defect discovered.
2. Inspectors present inspection findings to a responsible party representing railroad management and discuss how the defects can be corrected.
3. For non-compliances with FRA regulations, inspectors issue an FRA Inspection Report (Form FRA F 6180.96) to the railroad within 24 hours after the inspection. The RSD inspector may

recommend that FRA issue a violation, with an accompanying civil penalty. The FRA Chief Counsel reviews the recommendation and determines whether FRA will issue a violation and the amount of the civil penalty, if any, to be assessed.[5]

4. For non-compliances with CPUC General Orders, inspectors issue a General Order Inspection Notification (GOIN, also referred to as a GO Report) to the railroad within 24 hours after the inspection. For GOs 26-D and 118-A and Pub. Util. Code Section 7662 (which sets signage requirements; see Appendix A), CPUC Resolution ROSB-002[6] sets out a framework under which the railroad is given a period to correct non-compliances. If a follow-up inspection after that period finds that the non-compliances have not been corrected, another GOIN is issued, and the Director or Deputy Director of the Division has the authority to issue a citation, with accompanying fines, within a set period. A process is provided under which the railroad can request extensions and appeal the citation.

B. Regular Inspections

FRA and CPUC regulations direct CPUC to perform both regular and focused inspections. A regular inspection is conducted to ensure compliance with safety standards and regulations on railroads. The following are statistics on the number and results of regular inspections performed by RSD inspectors during FY 2024-2025. Examples of inspections are presented in Appendix B.

Total inspections

RSD inspectors:

- Performed 4,790 inspections and follow-up inspections to monitor the railroads' compliance with federal and state laws, and CPUC GOs.
- Cited 16,831 federal regulation defects.
- Recommended civil penalties to FRA for 1,320 violations of federal regulations.
- Completed 309 CPUC GO reports that identified 818 state regulation defects.[7]

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[5] There is a wide range of financial penalties for violations of applicable federal railroad safety regulations, depending on which regulation is violated and whether the violation is ruled as "willful." A penalty may be assessed against an individual only for a willful violation. The final penalty amount depends on the resolution of a claims conference between the railroad and the FRA. Penalties for violations of hazardous materials-related regulations potentially are much higher. For more information see https://railroads.dot.gov/legislation-regulations/civil-penalties-schedules-guidelines.

[6] As modified or otherwise affected by subsequent Commission actions, including Commission Resolution ALJ-299.

[7] Non-conformances with FRA regulations ("federal regulation defects") can only be reported by inspectors certified in the applicable railroad discipline in which the defects occur (e.g., track defects are reported by track inspectors). Accordingly, the numbers of federal defects are disaggregated by discipline in the following discussion. However, inspectors from any of the five railroad disciplines can identify GO defects, and these defects are not disaggregated by discipline in the discussion.

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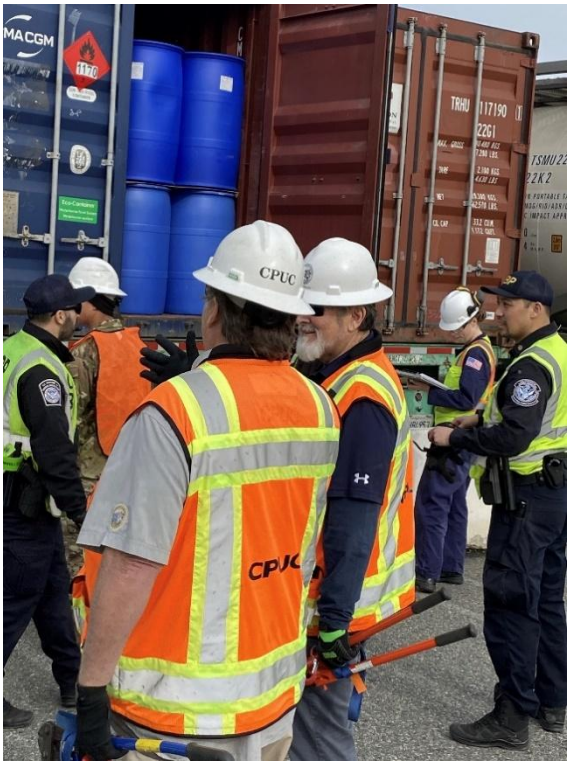
Hazardous Materials Inspections:



RSD inspectors conducting joint inspections in the Port of LA with the Multi-Agency Strike Force Operation (MASFO), the United States Coast Guard (USCG), Department of Homeland Security (DHS), US Customs and Boarder Protection (USCBP), LA County Sheriff's Department (LASD), Transportation Security Administration (TSA), and Department of Transportation (DOT).

- Inspected or evaluated 27,773 units[8] in 1,223 FRA inspection reports.
- Identified 1,834 federal regulation defects.

[8] A unit is a metric used to measure the activities of RSD inspectors. Units can be physical objects like locomotives, signal systems, and paper and electronic records generated by railroad companies; or actions performed by railroad personnel, such as switching operations. These are inspected or otherwise evaluated by inspectors for compliance with applicable regulations and railroad operating rules.

- Recommended 32 violations for civil penalties for federal defects identified during regular inspection activity.

Hazardous materials are substances that pose an unreasonable risk to health, safety, and property when transported in commerce, and have been designated as hazardous under the federal hazardous materials transportation law (49 U.S.C. 5103). A hazardous materials unit refers to each tank car, each record to ensure accurate documentation of the substance contained in a hazardous materials rail car or package, each evaluation of a hazardous materials unintended release mitigation plan, each inspection of the shipper's paperwork, and other similar items.

RSD hazardous materials inspectors conduct a variety of activities, including the investigation of accidents involving the actual or potential release of hazardous materials as reported by the Governor's Office of Emergency Services 24-hour Warning Center. Inspectors also conduct unannounced inspections at the facilities of shippers, consignees, freight forwarders, intermodal transportation companies, and railroads.

RSD hazardous materials inspectors also inspect facilities to ensure compliance with CPUC GO 161, Rules and Regulations Governing the Transportation of Hazardous Materials by Rail. Inspectors look for the appropriate grounding of cars to prevent dangerous static electricity buildup during unloading. GO 161 also has requirements for reporting the release or potential release of hazardous materials where there is a reasonable belief that the release poses a significant present or potential harm to persons, property, or the environment.

Equipment Inspections:

The RSD inspector conducting an audit of passenger equipment.

Electric panel door was observed unlocked and open, exposing passengers to high voltage equipment.

- Inspected or evaluated 68,684 units in 943 FRA inspection reports.
- Identified 9,146 federal regulation defects.

- Recommended 895 violations for civil penalties for federal regulation defects identified during regular inspection activity.

An Equipment unit refers to each locomotive, each rail car, inspection records or specific components thereof.

> Pub. Util. Code Section 765.5(d) requires CPUC to establish, by regulation, a minimum inspection standard to ensure that at the time of inspection, that railroad locomotives, equipment, and facilities located in the Class I railroad yards will be inspected not less frequently than every 120 days (three times per year).

During FY 2024-2025, RSD did not satisfy the above Public Utilities Code requirement. Of the 71 mandated facilities, 67 sites were inspected three times or more during the fiscal year. Facilities that have greater amounts of train traffic are inspected more often than those with less train traffic.

The primary reason for not meeting the mandate for the remaining 4 facilities was due to RSD vacancies. For the first three quarters of the fiscal year, RSD experienced approximately 20 percent vacancy rate for the equipment discipline. When a certified RSD inspector leaves, it takes at least one year to hire a new inspector, get the inspector appropriate training for federal certification, and train the inspector in the field using an experienced RSD inspector. During that period, RSD's ability to meet the mandate is reduced. In addition, the experienced inspectors may miss their individually assigned mandate segments because they spend a significant amount of time training new hires on California-specific laws and CPUC GOs.

Operations Inspections:

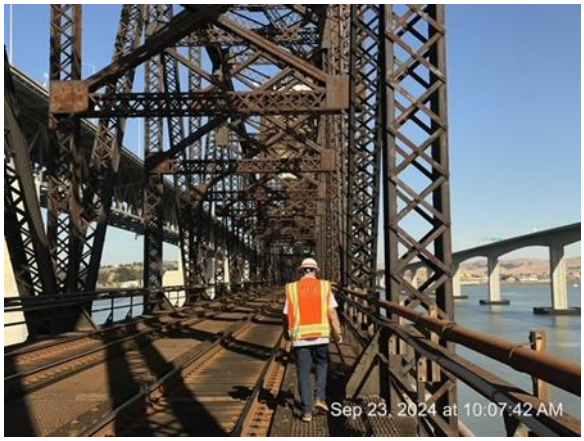
RSD, Operating Inspectors auditing a new electrified locomotive cab.

RSD, Operating Inspectors auditing a conventional diesel locomotive cab.

- Inspected or evaluated 8,196 units in 952 FRA inspection reports.
- Identified 1,724 federal regulation defects.
- Recommended 290 violations for civil penalties for federal regulation defects identified during regular inspection activity.

Operations inspection activities include ensuring the accuracy of train consist (train make up) records, observing crews performing switching operations, reviewing the accuracy and completeness of accident records, ensuring compliance with certifications and licenses, and similar items. Position vacancies and employees in training limit the ability of staff to provide statewide coverage.

Signal Inspections:



Moveable Bridge: CPUC observing an "annual bridge locking test" performed on Union Pacific Railroad's Benica-Martinez Bridge.

Relays: Verifying the correct relay corresponds with the correct track circuits for the bridge.

- Inspected or evaluated 5,900 units in 387 FRA inspection reports.
- Identified 1,249 federal regulation defects.
- Recommended 95 violations for civil penalties for federal regulation defects identified during regular inspection activity.

A Signal inspection unit refers to each signal system structure, maintenance and testing records, warning devices at crossings, and other electronic or mechanical signaling systems. RSD currently has two certified signal inspectors, both based in southern California. One signal inspector based in northern California is going through the certification process and should be certified in the 25/26 fiscal year.

Track Inspections:

RSD inspector observing railroad personnel inspecting track to identify defective conditions.

- Inspected or evaluated 17,464 units in 976 FRA inspection reports.
- Identified 2,878 federal regulation defects.
- Recommended 8 violations for civil penalties for federal regulation defects found during regular inspection activity.

Track units can be a mile of track, a switch, a roadway maintenance machine, a record, and other similar items involving the track structure.

> Pub. Util. Code Section 765.5(d) requires CPUC to establish by regulation a minimum inspection standard to ensure that all branch and main line track is inspected not less frequently than every 12 months.

Inspectors use several methods to inspect the track. Each method has its benefits and drawbacks depending on the terrain, steepness, and location.[9]

The methods include:

- Physically walking the track.
- Riding in a hi-rail vehicle (motor vehicle outfitted with steel rail guide wheels).

[9] The 2013-14 Annual Report to the Legislature provides a detailed explanation about the methods of track inspections: http://www.cpuc.ca.gov/rosb/

- Riding in an FRA or railroad owned geometry car (a passenger coach equipped to identify geometric track deficiencies that create accident risks).

In FY 2024-2025, RSD inspectors surveyed 4,365 miles of mandated track by conducting physical walking and hi-rail inspections. There are currently 5,881 miles of mandated track. RSD inspectors conducted numerous follow-up inspections to monitor the railroads' compliance and verify that the defects had been corrected. However, this mandate was not met due to staff vacancies. Vacancy rate for the Track discipline was approximately 22 percent during the fiscal year but have been filled in the last quarter. Track inspectors are going through the certification process and should be federally certified by 25/26.

C. Focused Inspections

A focused inspection is an inspection that may concentrate on specific discipline's regulations and/or a specific location or theme. These inspections target railroad yards and track that pose the greatest safety risk, based on inspection data, accident history, and rail traffic density. Focused inspections involve inspectors from a variety of disciplines or inspectors from a single discipline, working together at a specific location or rail facility. Focused inspections may be joint efforts between the FRA and RSD, although Pub. Util. Code Section 767.5 permits the CPUC to conduct the inspections as the CPUC determines to be necessary.

Pub. Util. Code Section 765.5(e) requires CPUC to conduct focused inspections of railroad yards and track.

Focused inspections allow RSD inspectors to evaluate all aspects of a railroad or railroad facility's operational and maintenance practices and procedures. This includes evaluation of railroad personnel's technical expertise and experience, and organizational safety culture. If corrective actions are recommended by RSD inspectors, a follow-up inspection is performed to determine progress by the railroad entity in carrying out the recommended actions. An example of a focused inspection is shown in Appendix C.

RSD along with multi agency inspectors, conducting an initial job briefing at a port intermodal facility during a focused inspection.

In FY 2024-2025, RSD inspectors performed 1,873 focused inspections (a subset of the regular inspections listed above), which consisted of:

- 510 hazardous materials inspections.
- 448 track inspections.
- 306 operations inspections.
- 208 signal inspection.
- 401 cross-discipline inspections.

D. Accident Investigations

RSD inspectors evaluate each accident when reported to the CPUC, usually by Cal OES, and determine the appropriate investigative response based on accident severity criteria, including:

- Impact on the public (evacuations, injuries, fatalities).
- Injuries or fatalities to railroad employees or passengers.
- Environmental impact.
- Impact on commercial transportation (highway closures, commuter interruptions).
- Violations of state or federal railroad safety regulations or operating rules.

In FY 2024-2025, there were 636 reported railroad-related incidents in California, down from 863 in the previous fiscal year. Each incident falls into one or more categories: 380 were related to crossing or trespasser incidents (155 of which were at a grade-crossing), 62 were materials or hazardous materials spills, 124 were derailments, and 70 were in other categories. These incidents resulted in a total of 174 fatalities and 125 injuries (compared to 228 fatalities and 138 injuries in the previous year), mostly to trespassers and road users. RSD supervisors determined that 298 incidents required further investigation. Appendix D describes an example of an accident investigation performed by RSD inspectors.

Pub. Util. Code Section 315 requires CPUC to investigate the cause of all accidents occurring within the state upon the property of any public utility directly or indirectly connected with its maintenance or operation, resulting in loss of life or injury to person or property damage.

E. Security Inspections

Among other provisions, the Local Community Rail Security Act of 2006, Pub. Util. Code Sections 7665 through 7667, requires that every operator of rail facilities in the state implement an infrastructure protection program to protect rail infrastructure in the state from acts of sabotage, terrorism, or other crimes.

The infrastructure protection program is to be updated by the rail operator at least once every year, and the updated plan is submitted to CPUC. Also, the operators are to provide CPUC with a risk assessment by incorporating a broad range of risk-related information. RSD reviews the programs, and it may conduct additional inspections to facilitate the reviews and order rail operators to improve, modify, or change their programs to comply with the Act.

In FY 2024-2025, RSD inspectors performed security inspections on all 40 railroads that operate in California.[10] All railroads inspected followed relevant state railroad security-related laws. Amtrak, UPRR, and BNSF railroads have national security plans that are reviewed annually by the FRA. RSD inspectors reviewed each railroad's security plan at various locations within the state along with virtual meetings and telephone interviews. These railroads are identified in the chart below.

[10] Sierra Northern Railroad Ventura Railroad is operated by the Sierra Northern Railroad on the old Fillmore Western Railroad line. It was determined that these are two individual railroads, which require a security plan for each location.

Following is a table identifying the railroad, inspection date, and compliance status.

RAILROAD	DATE OF INSPECTION	COMPLIANT	COMMENTS
Altamont Commuter Express	02/12/25	Y	
Amtrak Los Angeles	02/17/25	Y	
Amtrak Oakland	02/17/25	Y	
Arizona California Railroad	02/19/25	Y	
Baja California Railroad	04/14/25	Y	
BNSF	05/15/25	Y	
Cal Train	04/18/25	Y	
California Northern Railroad	02/19/25	Y	
Central California Traction Company	02/13/25	Y	
Central Oregan Pacific Railroad	02/19/25	Y	
Goose Lake Railway	06/06/25	Y	Conducted by phone interview
Los Angeles Junction Railroad	04/18/25	Y	
Merced County Central Valley Railroad	02/19/25	Y	
Metrolink	05/06/25	Y	
Modesto & Empire Traction	02/13/25	Y	
Napa Valley Railroad	02/15/25	Y	
Niles Canyon Railway	04/09/25	Y	
North County Transit District	05/22/25	Y	
Northwestern Pacific Railroad Company	05/21/25	Y	

Oakland Global Rail Enterprise	02/17/25	Y	
Pacific Harbor Lines	02/26/25	Y	
Pacific Southwest Railway Museum	03/24/25	Y	
Quincy Railroad	06/06/25	Y	Conducted by phone interview
Richmond Pacific Railroad	02/17/25	Y	
Sacramento Valley Railroad	06/06/25	Y	
San Diego & Imperial Valley	02/19/25	Y	
San Francisco Bay Railroad	04/08/25	Y	
San Joaquin Valley Railroad	02/19/25	Y	
Santa Cruz & Big Trees	04/10/25	Y	
Santa Maria Valley Railroad	06/02/25	Y	
St Paul & Pacific Railroad	04/10/25	Y	
Sierra Northern Railroad	01/19/25	Y	
Sierra Northern Railroad Ventura	01/19/25	Y	
SMART	02/16/25	Y	
So. Cal Ramp Services	03/24/25	Y	
Stockton Terminal & Eastern	02/12/25	Y	
Trona Railroad	01/23/25	Y	
UPRR	06/06/25	Y	Conducted by phone interview. Note: Security Manager is located in Omaha NE.
Ventura County Railroad	02/19/25	Y	
West Isle Line	01.14/25	Y	

II. Proactive Safety Efforts and Risk Management Activities

The CPUC strives to achieve zero accidents and injuries across all the utilities and businesses it regulates, and within all CPUC facilities. To achieve that goal, RSD embraces a comprehensive safety management approach that integrates public policy, risk management, and compliance with the federal and state laws and CPUC General Orders.

Safety culture improvement and proactive risk management are integral to RSD's mission of ensuring safe operation and maintenance practices of railroads in California. In addition to investigating specific violations of state and federal regulations, RSD inspectors and support and analytical staff carry out comprehensive and proactive safety oversight. A high priority of risk management involves looking beyond specific texts in the regulations to identify additional potential risks. As explained below in sections A through K, in addition to its mandated safety efforts, RSD uses proactive tools, cooperative engagement with railroads, inspection programs for high-risk areas, and monitoring of emerging rail technologies and projects.

A. Risk Management Status Reports

During field work, RSD inspectors may identify items of significant concern that are not addressed by federal or state regulations. When this happens, the inspectors complete a Risk Management Status Report (RMSR).

Once an RMSR is documented, the inspector and supervisor meet with the responsible railroad, shipper, or associated entity's responsible representative, convey the safety risk linked with the issue, and define a time-period in which the risk should be addressed. The RSD inspector performs a follow-up inspection to determine whether the risk was eliminated or sufficiently mitigated. If the railroad fails to take the steps required to resolve the issue, the RSD Program Manager will pursue the matter with the railroad officials responsible, and if necessary, bring the issue up to the Director for further corrective action.

During FY 2024-2025:

- 3 previous fiscal year RMSRs were closed out (i.e., the recommendations were implemented and/or an alternative conclusion was reached with the railroad).
- 6 new RMSRs were created. The issue areas were as follows:
    - 4 – Unsafe Conditions
    - 1 – Encampment
    - 1 – Unsafe Operating Practice

One of the new reports was closed.

B. Crude Oil Reconnaissance Team

The Crude Oil Reconnaissance Team (CORT) was established in 2013 to track the movement of crude oil being transported into, and throughout California. Additionally, this team now also tracks the movement of ethanol and liquid petroleum gas. The CORT is comprised of RSD inspectors from all five railroad disciplines (track, signal, hazardous materials, equipment, and operations).

Crude Oil. Team members obtain information from California refineries, such as planned crude oil unit train shipment arrival dates and routes. A "unit train" is a train that is composed of cars carrying a single type of cargo, and a crude oil unit train carries only crude oil. The trains tracked by CORT may have 100 individual tank cars. CORT also verifies the origin of crude oil shipments and whether the shipments contain Bakken crude, which is a more volatile commodity than most other types of crude oil. The team monitors crude oil unit trains to inform RSD management if Bakken crude enters the state and thus determine if any special actions must be taken.

During FY 2024-2025, a total of 12 crude oil unit trains entered California, all going to the Kern Energy Refinery in Bakersfield, with each unit train carrying 100 tank cars of Bakken crude. All the trains originated from Epping, ND.

Most of the crude oil entering the state arrives in unit trains. However, crude oil also enters in individual tank cars that are part of trains carrying mixed cargos, known as "manifest trains." Crude oil cars traveling in manifest trains are difficult for CORT to track until they reach a rail yard because refineries do not have information about which manifest trains are carrying crude oil cars and, therefore, cannot inform RSD. Once crude oil tank cars reach rail yards, RSD can obtain information about them from railroad yard management personnel, who know the contents of the various tank cars within their facilities as well as their final destinations once they leave the yards.

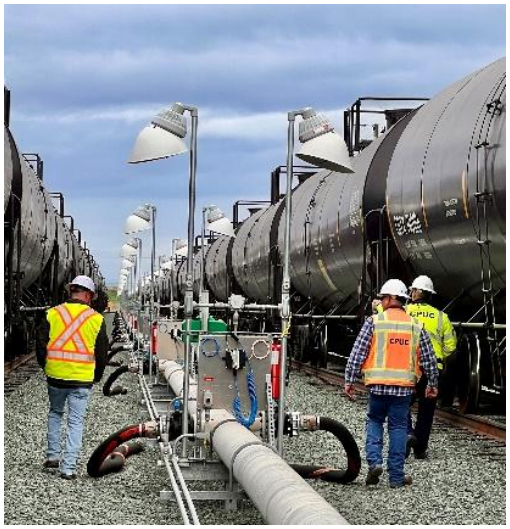
CORT personnel also inspect crude oil transfer facilities and related infrastructure to verify compliance with state and federal railroad regulations, as well as CPUC railroad related GOs. As part of these efforts, the team obtains data from each facility pertaining to its actual and expected future monthly train count, which are used to prepare a monthly CORT report on crude oil shipments coming into the state.

Ethanol unit trains entering the state. Since February 2019, CORT has been tracking the number of unit trains carrying ethanol entering the state in addition to the shipments of crude oil. Ethanol is an extremely volatile commodity that moves in large volumes throughout the state. There are three facilities that handle unit trains of ethanol in California: Kinder Morgan, Eco-Energy, and Pelican Renewables. As with crude oil, individual ethanol cars entering the state cannot be tracked until they reach rail yards and are assembled into trains with known final destinations. Ethanol shipments are included in the monthly CORT report.

Kinder Morgan, located in Wilmington, receives ethanol by rail from BNSF Railway (BNSF) via the Lomita Rail Terminal, which then moves it via pipeline to various refineries in Los Angeles County. The Lomita Rail Terminal received 171 unit-trains of ethanol in FY 2024-2025, ranging in size from

64 to 96 cars. When there is no room for these cars at the Kinder Morgan facility, they are stored in a rail siding outside the Kinder Morgan facility or a rail yard in Barstow.

Eco-Energy, located in Stockton, received its first ethanol unit train in June 2022. During FY 2024-2025, the facility received 57 ethanol unit trains, each containing approximately 105 cars. The trains are delivered by a short line railroad, the Central California Traction Company (CCT). Upon arrival, the product is moved via pipeline to several refineries in the Port of Stockton.



Inspection of the Eco-Energy Facility in Stockton.

Pelican Renewables, located in Stockton, received its first ethanol unit train in May 2022. During FY 2024-2025, the facility did not receive any ethanol as unit trains. Instead, ethanol was delivered as individual car shipments—about 230 railcars per month. These shipments are also delivered by CCT. Upon arrival, the product is transferred to storage tanks before being trucked to various refineries in the Stockton area.

Liquefied Petroleum Gas. Since April 2019, the CORT team has been tracking the number of individual tank cars containing Liquefied Petroleum Gas (LPG) in storage at various locations throughout California. Data produced by these new activities can be helpful to other agencies if cars carrying LPG release their contents due to derailments or other types of incidents.

To identify the number of stored cars carrying LPG, CORT contacts railroad managers, vendors, and train crews to locate yards storing both loaded and empty cars throughout California. There are currently four storage locations in the state: Arizona and California Railroad, Santa Maria Valley, Sierra Northern Railway, and Oakland Global Rail Enterprise. Storage at each of these locations fluctuates between 50 and 300 cars per month. New additional storage locations can be created at any time. RSD will inspect new storage locations when notified.

RSD conducts compliance inspections of these and any additional locations on a regular basis and tabulates current numbers in the monthly CORT report. When a defect is found such as missing

placards, the railroad and the shipping vendor are both notified. Depending on the lease agreement, either the railroad or the vendor is responsible for correcting the defect.

C. Railroad Bridge Evaluation Program

Conditions on or near railroad bridges can create safety concerns for the public, railroad employees, and the environment. These conditions can include structural damage, corrosion of steel components, silt build-up around supports, excessive loads, track with steep grades and sharp curves, and flooding.

Federal bridge safety standards are set out in 49 Code of Federal Regulations (CFR) Part 237. Among other requirements, railroad track owners must create a bridge management program, perform annual bridge inspections, and calculate load capacities. FRA personnel evaluate the railroads' compliance with these standards.

RSD's involvement in railroad bridge safety is important for regulatory oversight in California because FRA has relatively few employees specializing in railroad bridge safety. At the present time, only six FRA personnel evaluate the bridge management programs of 80,000 US railroad bridges.

RSD and FRA have agreed to work in concert to ensure that railroad track owners in California complete their bridge management programs and conduct joint railroad bridge observations. In the Railroad Bridge Evaluation Program (RBEP), two RSD inspectors focus on issues related to railroad bridges. The inspectors perform bridge observations, prioritizing these observations based on such risk factors as the proximity of railroad bridges to the identified Local Safety Hazard Sites across the state; to flammable vegetation; and/or to saltwater bodies, where salinity can cause increased rates of corrosion. These observations incorporate a photographic essay of each bridge span and related components, which creates a visual record of a specific point in time of a bridge's condition for future reference. RSD can cite bridge owners for violations of GOs or applicable Federal regulations. Where conditions do not violate regulations but pose other safety hazards, inspectors may issue an RMSR.

During FY 2024-2025, pursuant to the RBEP, RSD inspectors performed the following:

- 6 total bridge observations.
- 6 accompanying FRA track inspection reports on or near bridges.

During this reporting period, the number of completed railroad bridge observations was lower than in previous fiscal years due to a critical effort by RSD bridge inspectors to convert and migrate historical bridge records into the Rail Safety and Security Information Management System (RSSIMS). RSSIMS is a modernized, centralized electronic system developed for use by the CPUC

to create, manage, store, and retrieve regulatory records maintained by the Rail Safety Division, including RBEP documentation. This strategic initiative was necessary to ensure the long-term integrity, accessibility, and efficiency of the RBEP and other rail safety programs. The inspectors' work in building out the RBEP portion of RSSIMS represents a major step forward in modernizing regulatory oversight tools and will significantly enhance the program's effectiveness in future years.

D. Railroad Tunnel Evaluation Project

Railroad tunnel structural integrity can be weakened by such events as earthquakes, fires, flooding, and soil erosion, and by derailments and other railroad accidents. As well as safety risks for passengers and railroad employees, damage to tracks and other tunnel-related problems can create major delays for freight and passenger train traffic. RSD is helping to address railroad tunnel issues by assigning staff to evaluate tunnel conditions in the Railroad Tunnel Evaluation Project (RTEP).

The RTEP inspection team is made up of RSD track inspectors. Team members inspect the tunnels and track structures within tunnels by walking the track. The inspectors document tunnel and track conditions by taking photographs and videos and completing tunnel survey forms. Information collected on the survey forms includes tunnel history; height and width measurements; rail wear measurements; conditions of tunnel walls, ceilings, and floors; adequacy of drainage; and ballast conditions. Future tunnel surveys can use this information to assess whether tunnel conditions have worsened and if so, to what extent. A representative of the railroad responsible for the tunnel is present during the inspections, and they are made aware of concerns brought up by the RSD inspection team. RSD staff have completed railroad tunnel inventories for all railroads operating in California. There are approximately 120 tunnels that are in use and approximately 30 that are not in service. Seventy-two tunnels have been fully evaluated by RSD since 2016.

Tunnel inspections in FY 2024-2025 focused on tunnels that had been repaired by railroad corporations after fire and rain damage had occurred. RSD inspectors found no major problems after the repairs were made. The RSD inspections were limited due to a staff inspector shortage.

The 12 tunnel inspections listed below were performed in FY 2024-2025. No major issues were observed, and the few minor issues did not require immediate attention.

- UPRR Tunnels #4, #5, #6, #7, #8, and #24 on the Canyon Subdivision.
- UPRR Tunnel #5-½ on the Coast Subdivision.
- UPRR Tunnel #2 and #3 on the Mojave Subdivision.
- UPRR Tunnel #1 on the Oakland Subdivision.
- UPRR Tunnel #1 on the Martinez Subdivision.
- SERA Mendocino Railway Tunnel #2 on the Willits to Ft. Bragg line.

Mendocino Railway Tunnel #2

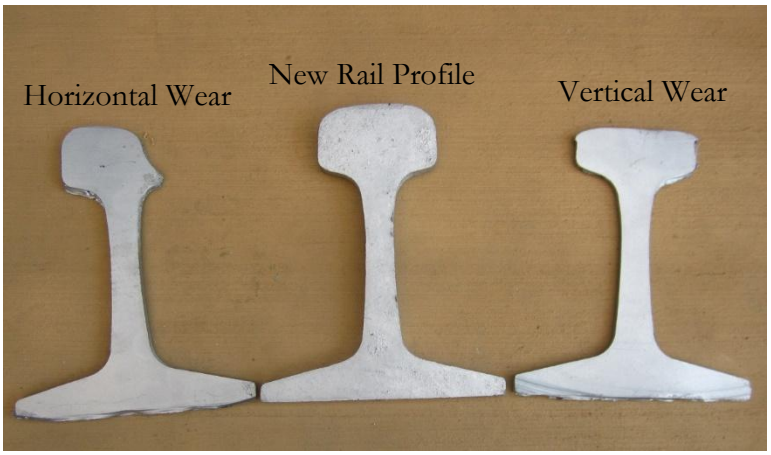
Oakland Subdivision Tunnel #1

Martinez Subdivision Tunnel #1

SERA Mendocino Railway Tunnel #2 Inspection of fire-damaged, timber-lined tunnel with railroad manager

E. Rail Head Wear Project

Rail head wear is caused by the abrasive interface of wheels from loaded railroad cars passing over rails. Rail head wear can cause problems affecting uniform track gage and train balance while the train is traversing a curve. Track gage and train balance must be maintained within specified tolerances for safe train passage. Therefore, excessive rail head wear can be a causal factor for train derailments, especially on sharply curved track in mountainous areas.



FRA and some railroads collect rail head wear measurements under some circumstances. However, there are no regulations mandating when rail should be replaced due to rail head wear. It is imperative that railroads establish good rail wear monitoring, maintenance, and replacement plans with remedial contingencies in the event of shortened rail head life expectancy, especially in multi-curved mountainous areas.

During FY 2024-2025, RSD inspectors on the Rail Head Wear Project (RHWP) team measured and documented rail head wear at 20 different locations of concern identified by our track inspection staff. The RHWP team measures rail head wear utilizing high-grade manual rail head wear gauges during tunnel surveys, derailment investigations, while conducting routine inspections at Local Safety Hazard Sites, and during other routine and special activities in sinuously curved track locations. Track inspectors also compare measurements with data collected by the FRA and the railroads themselves to look for uniformity or conflicting data. The track inspectors discuss their rail wear measurement findings with their branch supervisors and railroad company officers to assess rail monitoring, maintenance, and replacement plans.

Excessive rail head wear conditions may call into question a railroad's overall rail maintenance program plan. The RHWP intent is to focus on constructive discussions with high-level railroad officials regarding potential risks that may be overlooked in an existing rail monitoring, maintenance, or replacement plan. These ongoing discussions have proven beneficial for identifying high risk areas such as the Tehachapi Pass, where excessive rail head wear appeared at a faster rate than the railroad projected. This has opened a dialogue between RSD and the railroad for proactive adjustments to their rail replacement plans before a derailment occurs.

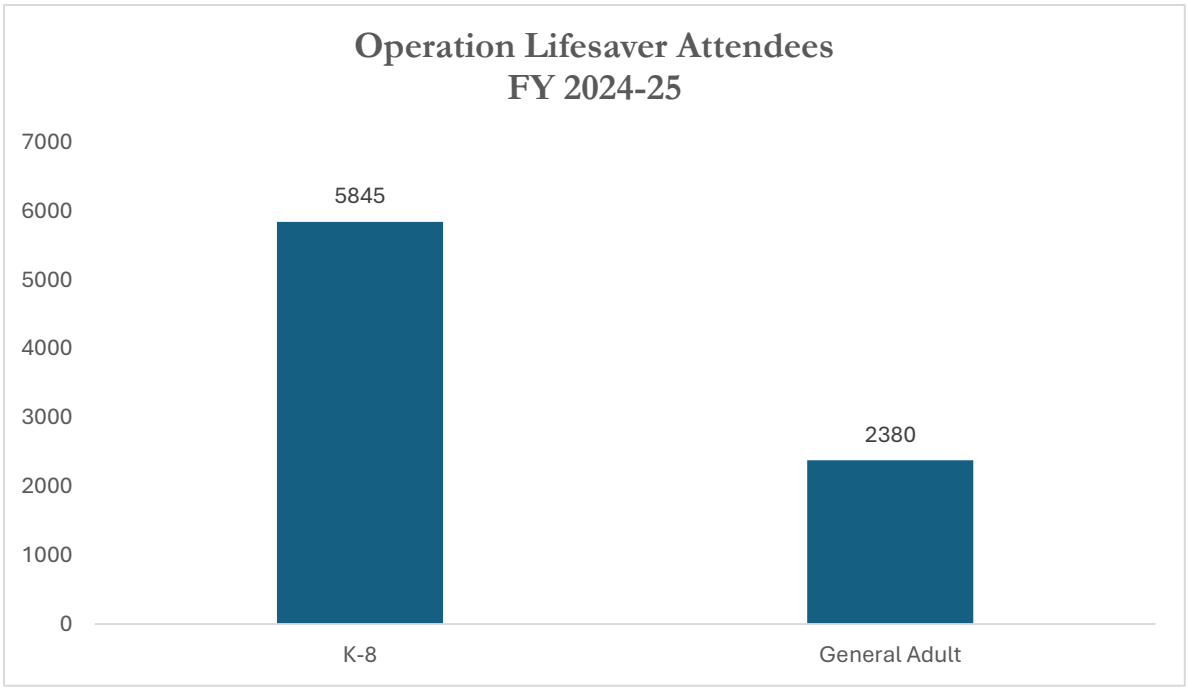
In the absence of FRA regulations concerning rail head wear, and as part of the CPUC's commitment to risk management and continually looking beyond the regulations, RSD plans to continue collecting rail head wear information. This information will allow RSD to advocate for more effective rail head wear monitoring, maintenance, and replacement plans by railroads.

F. Operation Lifesaver Presentations

Operation Lifesaver, Inc (OLI), a nonprofit organization, administers a public safety awareness campaign and is funded primarily by grants from the FRA. Operation Lifesaver's mission is to end collisions, deaths, and injuries at highway-rail grade crossings and on rail property through a nationwide network of volunteers who work to educate people about rail safety. OLI offers RSD opportunities to give presentations to groups interested in rail safety.

RSD inspectors and other staff have volunteered for Operation Lifesaver activities throughout the state, providing presentations to schools, community organizations, drivers' education classes, bus driving workshops and trucking organizations, as well as educating the public at weekend events such as festivals and safety fairs about the dangers of being on or close to tracks, the meaning of warning signs, and other safety-related topics.

The number of events that RSD staff participated in as well as the total attendance increased from the previous fiscal year. In FY 2024-2025 there were 102 presentations, and 8,245 attendees compared to 93 presentations and 2,929 attendees in FY 2023-2024.



During FY 2024-2025, RSD staff:

- Made 102 Operation Lifesaver presentations

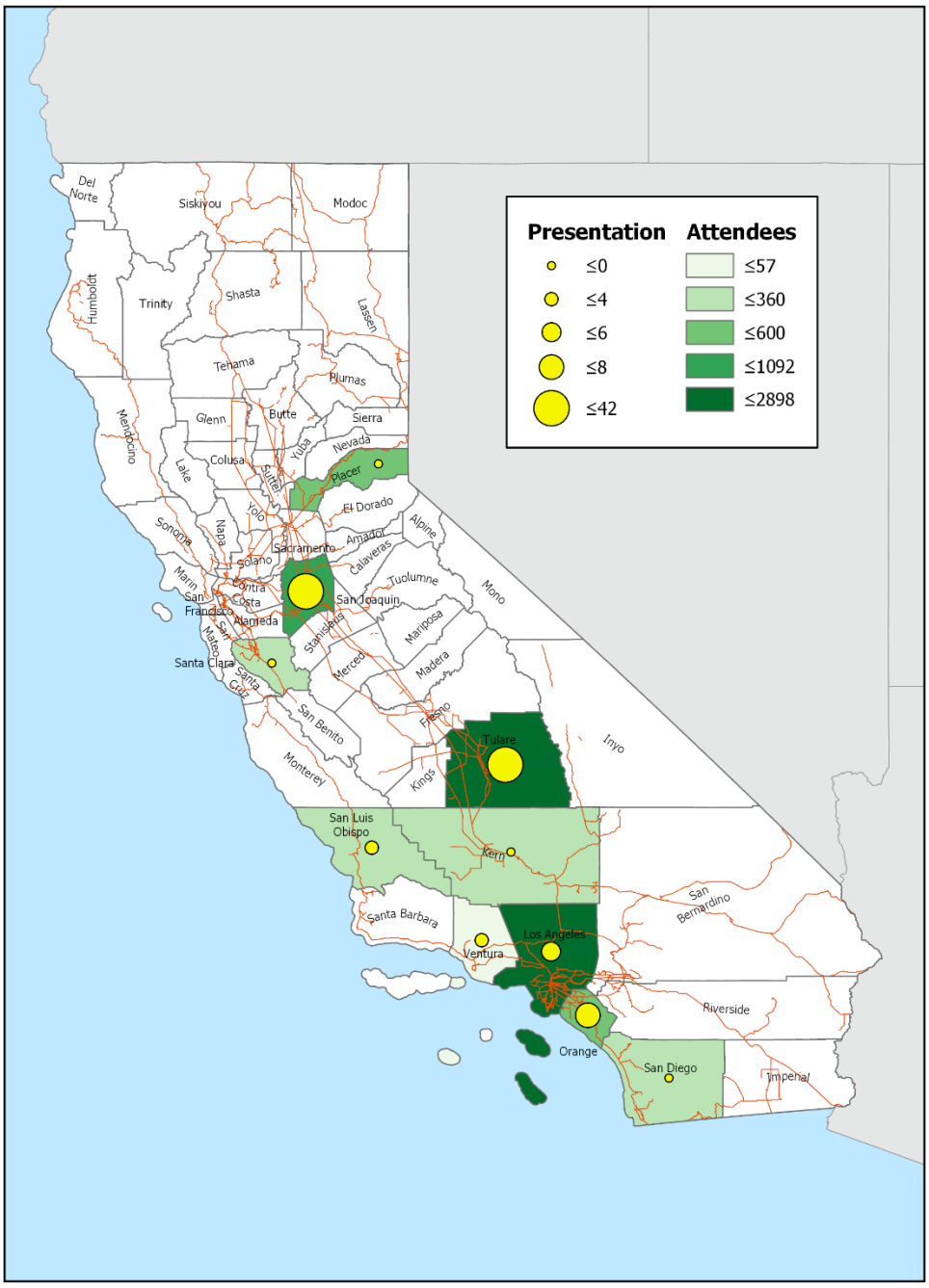
- Attended 11 community-wide events
- Reached 8,245 people

Operation Lifesaver events included:

- AgVenture – San Joaquin County School District (2) Events
- Imagine U-Children's Museum (15 Events)
- Mitchell Elementary School
- National Grade Crossing Safety Council (3 Events)
- Placer County Water Agency
- San Clemente Lifeguards (2 Events)
- San Luis Obispo Railroad Museum
- UPRR Big Boy Event
- Zenith Ag Safety Summit – Kern County

Operation Lifesaver Presentations

by county (FY 2024-2025)



G. Positive Train Control

Positive Train Control (PTC) technology uses a combination of wired and/or wireless digital communications, global positioning, and fixed wayside signal systems to send and receive a continuous stream of data about the location, direction, and speed of trains. PTC is designed to prevent train-to-train collisions involving different track blocks, over-speed derailments, incursions into established work zones, and movement through a track switch left in the wrong position. If a train does not slow for an upcoming speed restriction, stop indication, a switch improperly aligned, or a work zone boundary, which has not been given the approval to pass by the Employee-In-Charge, PTC will alert the engineer that action needs to be taken. If an appropriate action is not taken by the engineer, PTC will apply the train's brakes before the speed restriction, stop indication, switch in wrong position location, or work zone is violated.[11]

The Rail Safety Improvement Act of 2008 (Pub. L. No. 110-432) required each Class I railroad and each entity providing regularly scheduled, intercity or commuter rail passenger service to implement an FRA-certified PTC system by December 31, 2015, on:

- Its main line over which 5 million or more gross tons of annual traffic and poison or toxic-by-inhalation hazardous materials are transported, and
- Its main line over which intercity or commuter rail service is regularly provided.

In the Positive Train Control Enforcement and Implementation Act of 2015 (Pub. L. No. 114-73), Congress extended this deadline to December 31, 2018, and included provisions for railroads to request an additional 24-month extension to December 31, 2020, if certain criteria were met.

Each railroad that owns track (host railroad) is required to implement PTC along all tracks covered under the above laws. Two freight railroads in California, Union Pacific (UPRR or UP) and BNSF Railway (BNSF), were required to implement a PTC system under federal regulations and did so prior to the end of 2020. In general, short line railroads do not fall under the federal requirements to install PTC on their own railroad because they do not carry passengers or meet other criteria covered under the applicable regulations. However, the host railroad can require a short line to have PTC interoperability when the short line is operating on the host tracks.

There are several different PTC systems available that meet federal requirements, and different PTC systems are or will be in use by different railroads. Two different types of PTC systems are in use within California, which poses challenges when different systems are used by the host railroad and other railroads using that track (tenant railroads). To traverse host railroads, each tenant railroad must have interoperable PTC onboard equipment so that the different PTC systems can communicate with each other.

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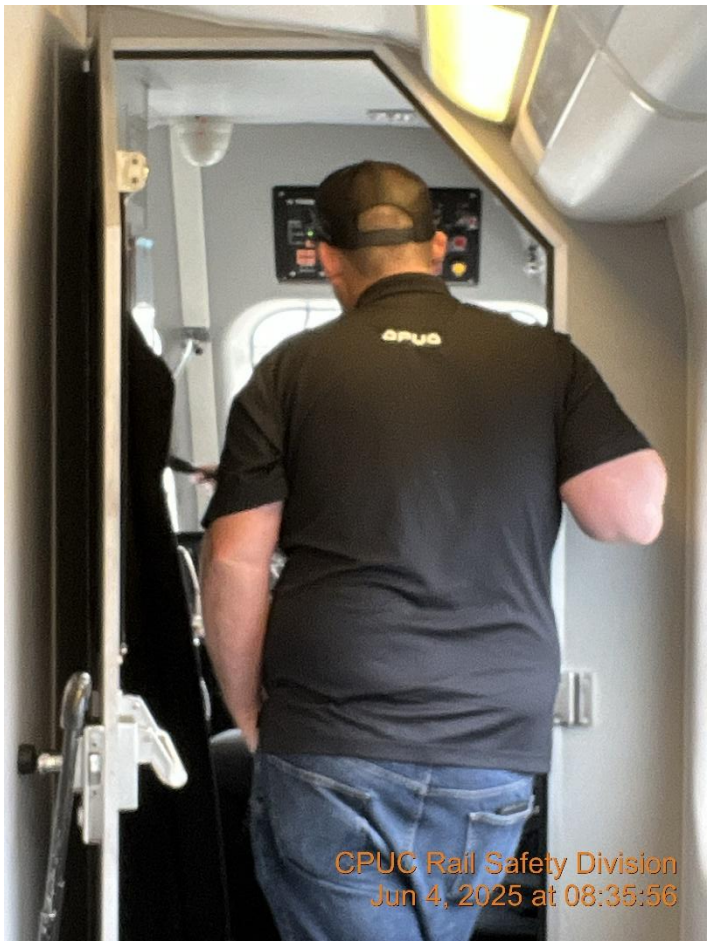
[11] The 2014 and 2015 Annual Reports to the Legislature provide more detail on PTC technology.

Metrolink (SCAX) - Arrow Line - Diesel Multiple Unit (DMU) PTC display prior to departure from San Bernardino Downtown Station towards Redlands University Station.

Staff performed the following activities during FY 2024-2025:

- 69 PTC operational train ride inspections.
- 69 encounters with railroad personnel to monitor performance.
- Ongoing correspondence with the railroads to determine status and implementation issues.
- Monthly meetings reviewing PTC activities.

RSD staff will continue to monitor the progress of PTC in California and make recommendations to ensure that railroads operate and maintain safe and effective systems.



CPUC Operating Practices (OP) inspector conducting FRA regulations-based OP and State General Order (GO) inspection, with PTC observation to monitor the pulse of PTC operations in California.

California PTC Status: Passenger Railroads[12]

	PASSENGER RAILROAD	STAGE OF PTC IMPLEMENTATION
1	SCAX	Conditional Certification.[13] Interoperability with tenants BNSF, UP, SDNX, and ATK on all host territory.
2	SDNX	Conditional Certification. Interoperability with tenants SCAX, ATK, and BNSF.

12 See Appendix I - List of Abbreviations for explanations of railroad abbreviations in the following two tables.

13 FRA Conditional Certification of the railroad's Safety Plan and PTC system granted. The Safety Plan demonstrates to the FRA that the respective railroad's PTC system meets all federal requirements and works as stated.

3	SMART	Conditional Certification.
4	ATK	ATK is a tenant railroad in California. Interoperability with host railroads SCAX, SDNX, BNSF, and UP.
5	PCMZ	Conditional Certification. Interoperability with tenants ATK, UP, and ACE.
6	ACE	ACE is a tenant railroad in California. Interoperable with host railroad UP and Caltrain.

California PTC Status: Freight Railroads

	FREIGHT RAILROAD	STAGE OF PTC IMPLEMENTATION
1	BNSF	All required subdivisions in California have PTC installed and in revenue service. BNSF is PTC interoperable with SCAX, SDNX, ATK, and UP.
2	UP	All required subdivisions in California have PTC in revenue service. UPRR is interoperable with BNSF, SCAX, ATK, ACE, and PMCZ.

H. California High-Speed Rail

California High-Speed Rail System

The California High-Speed Rail Authority (CHSRA), located within the California State Transportation Agency, is responsible for planning, designing, building and operation of the California High-Speed Rail (HSR) system. Phase 1 of the system is the 494-mile San Francisco/Merced to Los Angeles/Anaheim section approved by California voters in Proposition 1A in 2008. Future extensions will proceed from Merced to Sacramento and from Los Angeles to San Diego. In November 2024, the Authority entered a Memorandum of Understanding with the High Desert Corridor Joint Powers Authority and Brightline West to connect a CHSRA station at Palmdale with a Brightline West station at Victor Valley.

The system is planned to encompass over 800 miles of rail, with up to 24 stations. Construction has been taking place on a 119-mile portion of the 171-mile Central Valley Segment (Merced to Bakersfield), between the city of Madera and to the south, Poplar Avenue, about twenty miles north of Bakersfield.

According to the CHSRA's 2025 Project Update Report, CHSRA CEO Ian Choudri aims to efficiently deliver the nation's first true high-speed rail system by updating and providing clarity on the Authority's design criteria, scope, cost, procurement strategy, ridership, and schedule. After becoming CHSRA CEO in August 2024, Choudri established a 100-day plan to remove overlapping functions and red tape, increase collaboration, and improve decision making. Choudri stated that he would release updated project costs and schedule estimates in 2025.

CHSRA held an industry forum in January 2025 with more than 400 attendees, including construction, design, and private equity professionals. The forum was aimed to discover proven track system configurations, system integration strategies, ways to achieve early commercialization of assets, and how to eliminate a "stop and go" funding process. RSD staff attended the industry forum and began discussions with CHSRA safety and operations staff. RSD staff provided CHSRA staff typical sections demonstrating compliance with CPUC General Orders 26-D and 118-A.

The Authority's immediate goal is to carry passengers in under three hours from the Bay Area at Gilroy to the Los Angeles area at Palmdale. The Authority favors an extension of the 2030 sunset date for the state Cap-and-Trade program.[14]

Brightline West High-Speed Rail System

Brightline West plans to construct a privately owned and operated electrified high-speed passenger rail system that will connect Southern California and Las Vegas, Nevada. The 218-mile line will be constructed primarily within the Interstate 15 right-of-way on an alignment that will largely run in the median of the freeway under agreements with Caltrans and the Nevada Department of Transportation. A Brightline West station to be constructed adjacent to the existing Rancho Cucamonga Metrolink station will provide connectivity for passengers to travel throughout the Southern California passenger rail network, including access to Los Angeles Union Station. Additional Brightline West stations will be built in Hesperia (for certain hours of local rail service), Apple Valley, and Las Vegas.

Brightline West held a groundbreaking ceremony in Las Vegas on April 22, 2024. Construction in California is planned to start in late 2025, with project completion within three years.[15]

RSD's Role

With its high speeds and hundreds of passengers on each train, HSR poses large potential risks. Even at low speeds, incidents can have significant consequences. RSD, with its regulatory authority over high-speed rail as a passenger rail system, has important responsibilities in helping to ensure the safety of HSR.

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[14] CHSRA, 2025 Project Update Report

[15] https://www.brightlinewest.com/overview/project

RSD staff inspect joint corridor locations where HSR construction sites and conventional freight train and passenger train properties interface. These inspections focus on HSR construction activities that may endanger railroad workers on adjacent properties and/or potentially interfere with conventional railroad operations. The work associated with HSR can create unsafe conditions in close quarters between HSR and railroad properties. For example, when HSR contractors are moving building materials and equipment that could come into proximity to freight train operations, that could create a safety risk for HSR and railroad workers.

In June of 2025, RSD staff observed that CHSRA had constructed about 520 feet of track near Wasco with five switches for spurs leading to a proposed supply yard to be used during HSR construction. The track will connect to the adjacent BNSF Bakersfield Subdivision.

CHSRA switch leading to future yard

RSD reviews grade crossing applications from CHSRA and Brightline West to ensure that the applications incorporate all applicable state and federal requirements. [16] The applications mostly consist of overpass and underpass structures (which are referred to as grade separations) and related construction plans that eliminate the need for at-grade crossings. While grade separated crossings are more expensive than the at-grade crossings that are common on conventional railroad systems, grade separation eliminates train collisions with vehicles and pedestrians at crossing locations.

[16] Crossing applications are reviewed and approved by RSD's Rail Crossings and Engineering Branch.

In August 2022, the Commission approved Resolution SX-148, which adopted a process for using staff resolutions for Commission approval of grade-separated railroad crossings to be constructed as part of the Brightline West project.

In FY 2024-2025, RSD did not approve any crossing applications from either CHSRA or Brightline West.

I. Heavy Grade Audit Project

RSD initiated the Heavy Grade Audit Project (HGAP) at the start of 2020 as part of its efforts to proactively manage public safety risks due to train make-up rule changes. Train make-up refers to the placement of individual railcars that make up a train. When assembling a train, railroads consider a variety of factors — such as weather conditions, terrain, each car's weight, length, freight, and whether it is loaded or empty — when determining its position in the train. Additional locomotives also can be placed at other locations within trains to increase power and braking.

The purpose of HGAP is to identify potential and imminent risks, caused by changes in train make-up rules by railroads, to the safe operation of freight trains in mountainous areas in California, where trains encounter steep grades and sharp curves ("heavy grades").

UPRR System Special Instructions Item 8, "Heavy and Mountain Grade Operations," defines territories with a grade of one percent or more as "Heavy Grade" territories that require special train handling due to steep grade and sharp curves. The potential for a derailment or an uncontrolled train movement increases in these areas.

Train make-up affects the weight distribution of trains and their ability to safely traverse railroad track, depending on such factors as track grade and curvature, and how crews handle train speed and braking. Improperly assembled trains are more susceptible to derailment. For example, if cars are arranged such that empty rail cars alternate with loaded, heavy cars, the empty cars can become compressed between the loaded cars and derail when the engineer applies the train's brakes. Similarly, if the engineer accelerates the train too abruptly it may pull the rail cars apart and/or derail them. Mountainous areas with steep grades and sharp curves pose the greatest potential derailment risks. These risks also have increased as the railroads have increased the length, and correspondingly the weight of their trains. Maximum train lengths have increased from approximately 5,000 feet in the 1970s to approximately 17,000 feet in 2023.

Although the FRA has issued non-binding guidance, there are no FRA regulations directing specific train make-up arrangements. Under a May 2004 settlement agreement, CPUC has the power to enforce the train make-up rules set by the two major freight railroads operating in the state, UPRR and BNSF, for their own operations. These railroads also are required to notify the CPUC on or before the day they change their make-up rules, including an explanation of the processes or decision criteria employed by the railroads in order to assess the safety of the proposed rules and the

application of the criteria to the site in question.[17] However, the railroads can remain in compliance with the settlement agreement and still alter their make-up rules in ways that potentially increase derailment risks.

It is because of these potential risks that RSD initiated the HGAP inspection teams to conduct field inspections to determine how changes in make-up rules may affect the safety of railroad operations. Among other activities, RSD inspectors discuss the configuration changes with train crews to discover whether the crews themselves have experienced increased difficulties, received adequate training, or perceived any new risks in train operations over sections of track where the new rules are in force. HGAP teams also assess the effects train make-up rule changes may have on tracks and bridges, such as increased rail wear or the structural integrity of bridges.

When HGAP personnel find that a rule change may increase safety risks, they bring their concerns to the attention of RSD management. RSD managers and inspectors may then meet with railroad management to discuss these concerns. The HGAP team can explain its findings, share any risk data team members have collected, and show railroad management why RSD believes that the rule change should be modified or withdrawn.

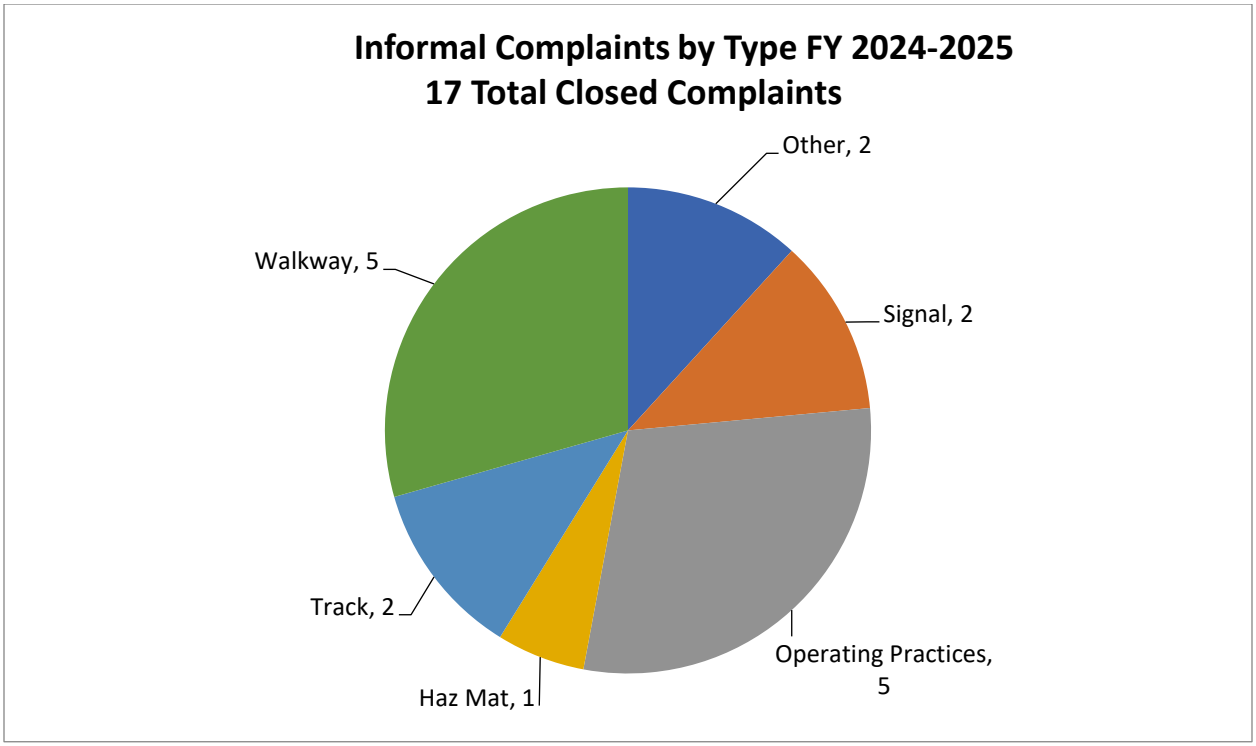
J. Safety Complaint Investigations

RSD investigates complaints related to railroad safety that are received from a variety of sources, including railroad employees, railroad unions, and the public. In FY 2024-2025, RSD investigated and closed 17 such complaints.

In these investigations, RSD inspectors may find non-conformances with railroad safety regulations. Where these involve state regulations, RSD directs the railroads to comply. If the complaint pertains to federal regulations, RSD inspectors communicate with the FRA to inform that agency of the complaint, avoid duplication of efforts, and ensure that the complaint is properly resolved.

In many instances, RSD looks beyond the specific texts of applicable regulations to identify non-regulated risks and other safety issues raised by complainants, and strives to work with railroads, shippers and other entities associated with the complainants' safety concerns to find resolutions. However, in some cases, such as complaints regarding homelessness, RSD may lack the regulatory authority to resolve an issue raised by a complainant despite the safety hazards they describe.

[17] Commission Decision 06-02-013, *Opinion Modifying Decision 97-09-045 To Conform It to Federal Court Decisions*, February 16, 2006, https://docs.cpuc.ca.gov/published/Final_decision/53822.htm



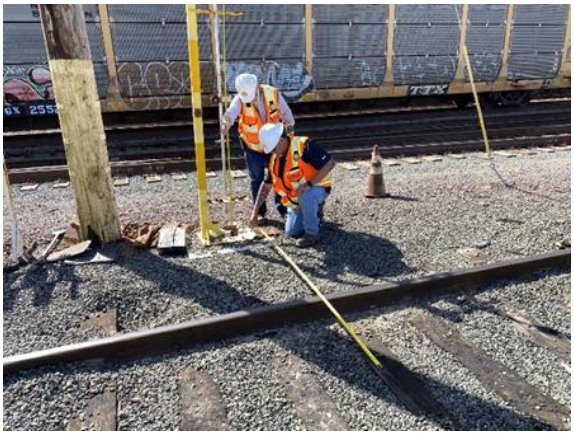
K. General Order Training Program

The General Order Training Program (GOTP) was initiated in 2016 to improve RSD inspectors' understanding and uniform application of CPUC's railroad safety GOs and related Public Utilities Code sections. Each of the RSD's Railroad Operations and Safety Branch (ROSB) four regions have two instructors, who are responsible for training their region's inspectors. Inspectors receive this training every two years to retain proficiency. The two instructors also give condensed presentations to railroads and businesses on the state's GOs at their request. The GOTP represents RSD's commitment to continuing education for its inspectors. Continued internal training and external education improves compliance and reduces the risks of railroad accidents and injuries.

New inspector and refresher training for FY 2024-2025 started in October 2024 with several updated presentations. 10 training sessions were held covering GOs 26-D, 72-B, 75-D, 118-A, Public Utilities Code 7662, General Order and Code Enforcement, and General Order Inspection Reporting. 42 inspectors, three PURAs, and two Transit inspectors received training in-person. Four inspectors received training in Webex sessions. Classroom and virtual training followed by field exercises that reinforced the application of GOs and PU Codes.

Three presentations were given to 41 Maintenance of Way employees and managers of railroad corporations. These abbreviated sessions were designed to ensure that workers were aware of California's General Orders 118-A (Walkways) and 26-D (Clearances).

RSD continues to expand and update its GOTP program to ensure continued expertise in its inspector ranks. In addition to training inspectors, RSD contacts railroads reminding them of their requirement to report incidents, derailments, service interruptions, and hazardous materials releases to the Governor's Office of Emergency Services (Cal OES) and the California Highway Patrol.



GO 26-D: Measuring Impaired Side Clearance

GO 26-D: Measuring Impaired Side Clearance

GO 118-A: Measuring height of tripping hazard

GOs 118-A and 26-D: Measuring Side Clearance

GO 72-B: Before**:** Palm Avenue non-complying crossing.

GO 72-B: After: Completely renewed crossing with new track.

GOTP Field Training Checking Gage and Switch Point Fit

Railroad Maintenance of Way employee presentation.

III. Investigations of Uncontrolled Train Movements

Pub. Util. Code Section 916.1 requires the CPUC to annually report the results of its investigations of runaway trains or other uncontrolled train movements that threaten public health and safety, as per Pub. Util. Code Section 7661. Similarly, Pub. Util. Code Section 7711.1 requires the CPUC to collect and analyze near-miss data for incidents in California occurring at railroad crossings and along the railroad rights-of-way. Pub. Util Code Section 7711.1 states, "[f]or purposes of this section, "near-miss" includes a runaway train or any other uncontrolled train movement that threatens public health and safety reported to the Commission pursuant to Section 7661."[18]

In FY 2024-2025, RSD investigated one uncontrolled train movement that involved six locomotives that were not secured properly and rolled a short distance before being stopped by a derailing device. As a result of this incident, two of the locomotives derailed, spilling 100 gallons of diesel fuel onto the ground. This did not occur on a passenger route and did not affect the main line.

[18] Pub. Util. Code Section 7661 requires such uncontrolled movements to be reported to the California Governor's Office of Emergency Services, which in turn notifies CPUC.

IV. Derailment and Local Safety Hazard Sites

Pub. Util. Code section 916.2 requires the CPUC to report to the Legislature on sites on railroad lines in the state it finds to be hazardous. The sites on railroad lines the CPUC identified as hazardous were identified in 1997 in a formal Commission Decision, D.97-09-045, and were termed Local Safety Hazard Sites (LSHSs). Two methods to determine sites were used: 1) sites determined by a statistically significant higher derailment rate than elsewhere on the line, and 2) sites determined by the operating railroad to require stricter operating practices than elsewhere on the line.

LSHS locations have not changed their physical characteristics, and therefore no change has been made to the list since 1997.

Section 916.2 also requires the CPUC to include a list of all railroad derailment accident sites in the state on which accidents have occurred within at least the previous five years, describe the nature and probable causes of the accidents, and indicate whether the accidents occurred at or near sites that the CPUC has determined to be hazardous.

The list of derailments is located on the CPUC's website at http://www.cpuc.ca.gov/rosb/.

Table 1 lists the accidents that have occurred "at or near" an identified local safety hazard site within the previous five years pursuant to Pub. Util. Code section 916.2(a). The original analysis identifying these sites was based on the higher risk of main line and siding accidents.

Table 1—List of Local Safety Hazard Sites

*LSHS #	CURRENT LSHS TRACK LINE	PREVIOUS LSHS TRACK LINE AT TIME OF D.97-09-045[19]	RR MILEPOST	NUMBER OF DERAILMENTS 2020-24	OVERLAP WITH SITE #**
16	UPRR Mojave Subdivision	SP Bakersfield Line	335.0 to 359.9	21	
9	UPRR Black Butte Subdivision	SP Shasta Line	322.1 to 332.6	1	#10
10	UPRR Black Butte Subdivision	SP Shasta Line	322.1 to 338.5	0	#9
19	UPRR Mojave Subdivision	SP Bakersfield Line	463.0 to 486	0	
12	UPRR Roseville Subdivision	SP Roseville District	150.0 to 160.0	2	

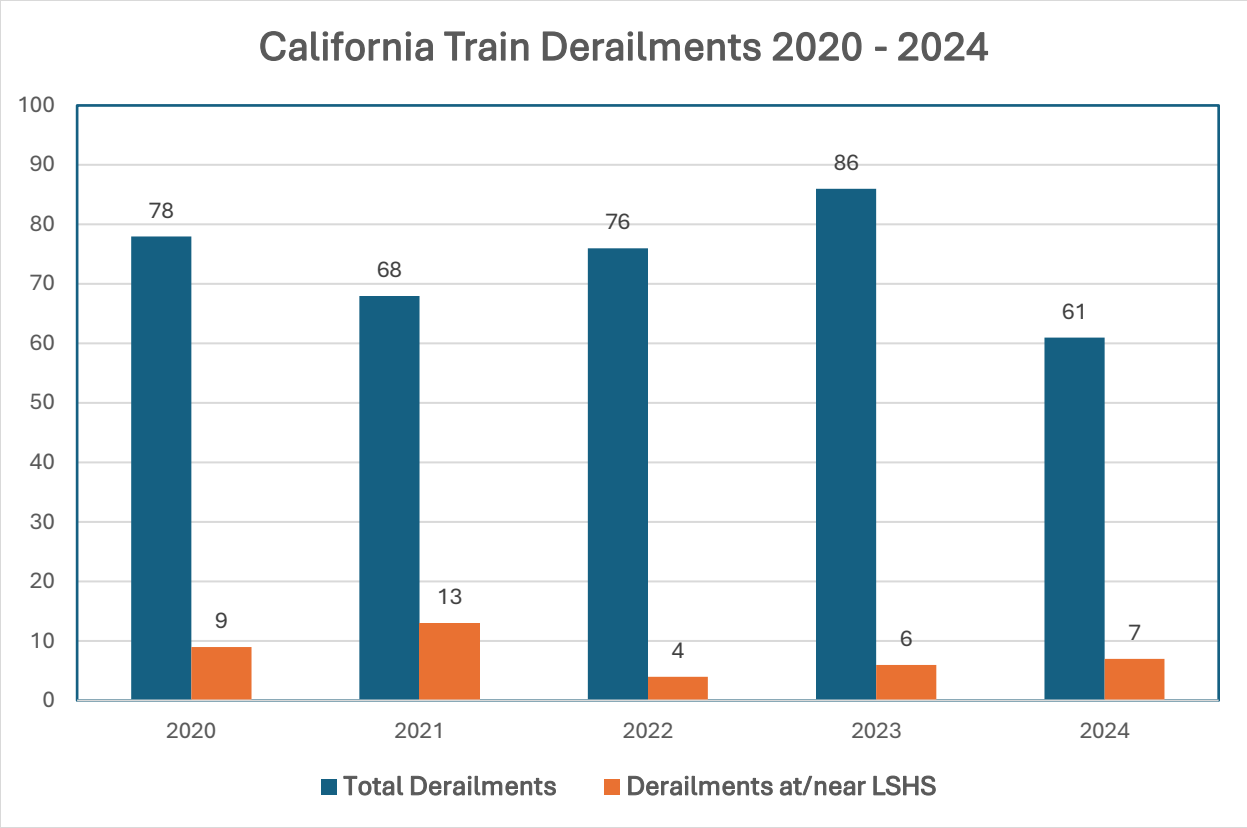
[19] In 1996, UPRR purchased Southern Pacific Railroad.

6	UPRR Yuma Subdivision	SP Yuma Line	542.6 to 589.0	3	#3, #4
22	UPRR Canyon Subdivision	UP Feather River Division	234.0 to 240.0	0	#25
25	UPRR Canyon Subdivision	UP Feather River Division	232.1 to 319.2	3	#22, #23
3	UPRR Yuma Subdivision	SP Yuma Line	535.0 to 545.0	0	#6
23	UPRR Canyon Subdivision	UP Feather River Division	253.0 to 282.0	0	#25
4	UPRR Yuma Subdivision	SP Yuma Line	586.0 to 592.0	0	#6
26	BNSF Gateway Subdivision	UP Bieber Line	15.0 to 25.0	0	
31	BNSF San Diego Subdivision	ATSF San Diego	249.0 to 253.0	2	
1	UPRR Coast Subdivision	SP Coast Line	235.0 to 249.0	0	
7	Central Oregon and Pacific Railroad Siskiyou Subdivision	SP Siskiyou Line	393.1 to 403.2	0	
27	UPRR L.A. Subdivision, Cima Grade		236.5 to 254.6	2	
28	BNSF Cajon Subdivision	ATSF Cajon	53.0 to 68.0	3	
29	BNSF Cajon Subdivision	ATSF Cajon	81.0 to 81.5	1	
30	BNSF Cajon Subdivision	ATSF Cajon	55.9 to 81.5	1	

* The LSHS number (LSHS #) is for identification purposes only and does not indicate any ranking.

** The two methods of determining LSHSs described earlier sometimes produce different site boundaries. Where a site's boundaries identified by one method overlap with another site identified by the different method, the other site is listed in this column.

Within the previous five calendar years, California experienced 369 derailments. Of that total, 39 derailments, or 10.56 percent, occurred at or near local safety hazard sites. Local safety hazard sites represent 366 miles out of approximately 5,881 miles of track in California. For this report, "at or near" includes any location of railroad track along the railroad right-of-way that is contained in the segment of railroad designated to be a local safety hazard site, including the distance of track one mile on each side of the local safety hazard site. Maps of local safety hazard sites are included in Appendix F.



Source: Federal Railroad Administration, Office of Safety Analysis:
Total derailments: Table 1.12, Ten Year Accident/Incident Overview and Table 3.18, Accident By State/Railroad
Total derailments at/near LSHS: Table 3.11, Accident Detail Report, as calculated by RSD staff

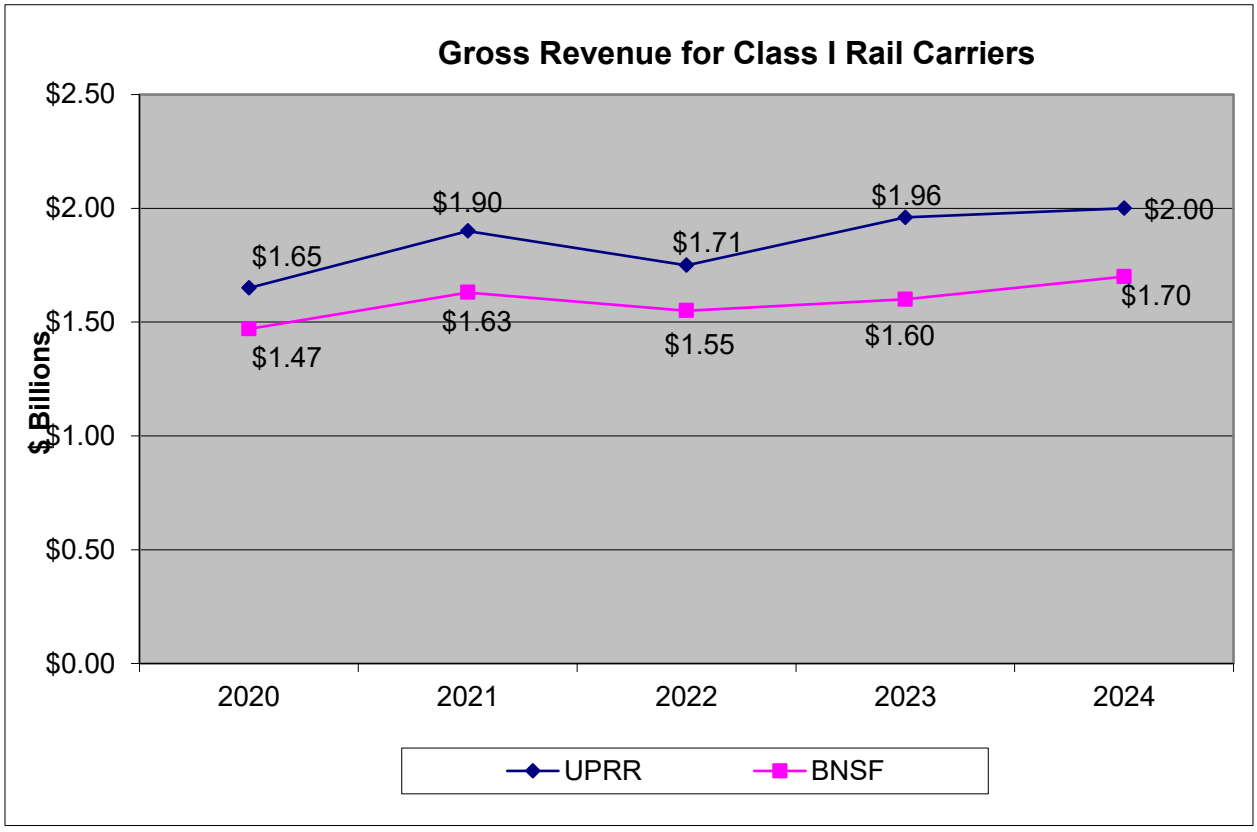
V. Regulatory Fee Impact on Competition

Pub. Util. Code Section 309.7 requires the activities of the CPUC that relate to safe operation of common carriers by railroad, other than those relating to grade crossing protection, to be supported by the fees paid by railroad corporations.

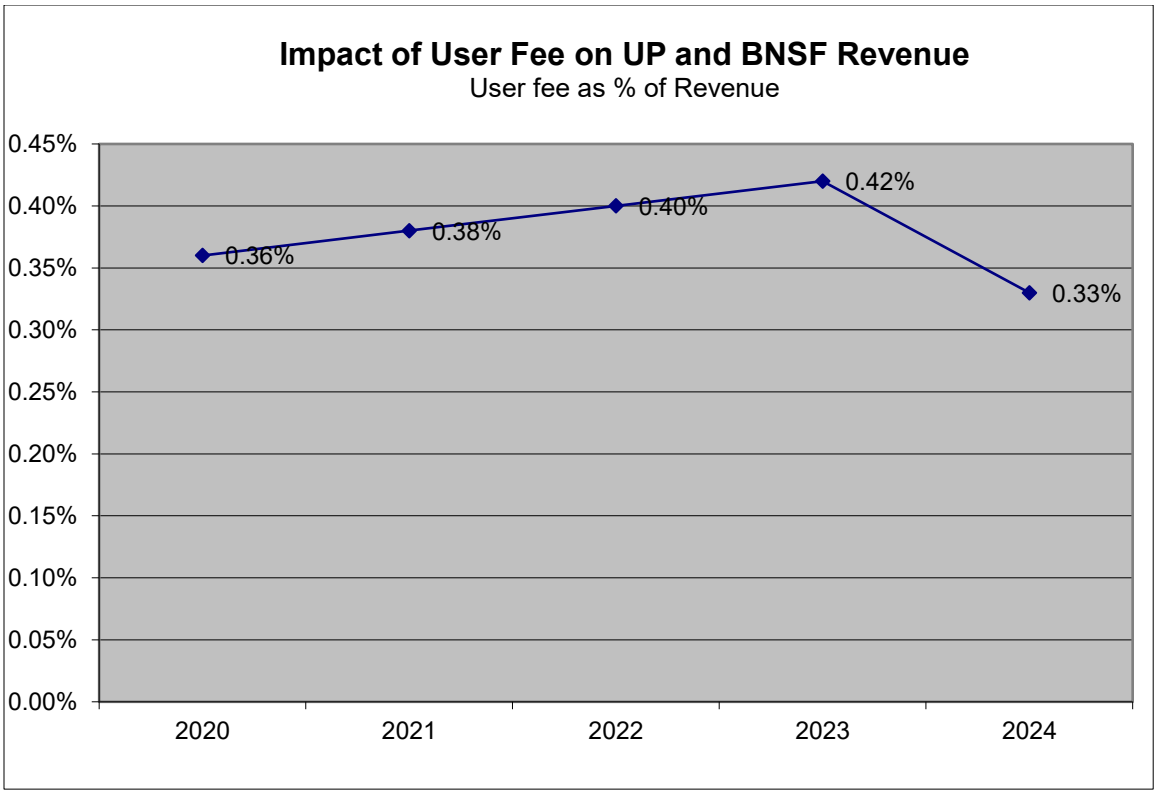
Pub. Util, Code Section 916.3 requires the CPUC to report annually on the impact on competition, if any, of the regulatory fees assessed by railroad corporations for the support of CPUC's activities.

In FY 2024-2025, the Legislature appropriated $12.75 million from the CPUC Transportation Reimbursement Account. The fees paid by the railroad corporations are deposited into a dedicated subaccount within the CPUC Transportation Reimbursement Account and are the sole funding source for the ROSB program. The fees do not fund any other CPUC programs.

The railroad user fees assessed in FY 2024-2025 on UPRR and BNSF constituted 0.33 percent of their combined intrastate revenues. This amount had a negligible impact on the major California railroads' profits and was unlikely to have had any effect on competition. The following two graphs show the percentage of user fees versus railroad revenue last year.



Source: the railroads report their revenues to CPUC annually to determine the user fee that funds ROSB


Impact of User Fee on UP and BNSF Revenue
User fee as % of Revenue
0.45%
0.40%
0.35%
0.30%
0.25%
0.20%
0.15%
0.10%
0.05%
0.00%
0.36%
0.38%
0.40%
0.42%
0.33%
2020
2021
2022
2023
2024

VI. Challenges for Rail Safety

Trespassing on Railroad Property by Unhoused Individuals

A railroad-related trespasser is any person who enters or remains upon an area on railroad property that he or she is not authorized to access, including railroad equipment, or in railroad facilities near railroad equipment and on railroad rights-of-way (ROWs).[20] Trespassing along railroad ROWs and within railroad infrastructure such as yards is the leading cause of rail-related deaths in America.

Hundreds of people die each year in the U.S. from rail-related trespassing accidents, and additional hundreds are injured.

Trespassing by the unhoused is a particularly difficult problem. Many locations in California near railroad tracks have been occupied by encampments. Tents and other structures, possessions, and debris frequently are placed in unsafe proximity to railroad tracks.

Apart from the risks to individual trespassers, encampments often create hazards which impede the inspections of train equipment and tracks necessary for safe operations, damage rail infrastructure, and adversely impact service.

RSD has the regulatory authority to enforce measures that can reduce some safety issues created by this situation. The disposal of waste materials or other disturbances on walkways that create tripping hazards in the vicinity of railroad ROWs would violate GO 118-A, which sets standards for walkway surfaces alongside railroad tracks. As stated by that GO, "The Commission, after hearing, may order the railroad corporation to eliminate any unsafe walkway condition and may specify such reasonable time within which the improvement shall be completed as may be appropriate under the circumstances."

Similarly, tents, wooden structures, and miscellaneous debris in encampments may violate GO 26-D, which sets clearance standards between railroad tracks and structures and obstructions adjacent to tracks. The GO states that "no railroad or street railroad corporation shall operate any cars, trains, motors, engines, or other rolling equipment over its own or other tracks, except as hereinafter provided, on which overhead or side clearances, or clearances between tracks, are less than the minimum herein prescribed…"

These GOs cover only a small portion of the railroad safety issues presented by the unhoused near railroad properties. An additional tool to seek removal of the encampments and the associated safety and security concerns is the use of the Risk Management Status Report (RMSR). The RMSR process is used by RSD Inspectors to identify safety hazards that are outside the scope of federal or state regulations. RSD staff have met with local governmental officials and railroad company personnel to discuss ways of addressing these issues. If necessary, the issue is brought up to the Director or to the CPUC for further enforcement action.

To fulfill commitments made in CPUC's Environmental and Social Justice Policy, RSD staff regularly meet with local governmental officials and railroad company personnel to discuss ways

of addressing these and other safety issues. Some railroads, such as UP, have website links where encampment locations and associated unsafe conditions can be reported and data such as photographs and maps can be entered. Other railroads have furnished toll free reporting numbers and telephone numbers of managers responsible for encampment issues to RSD.

Because of the efforts of RSD staff and collaboration with the Railroads through the above processes, RSD inspectors have observed timely, and compassionate removal of encampments on railroad property.

An example of this effort is provided in Appendix E.

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[20] Kathryn Stanchak and Marco DaSilva, *Trespass Event Risk Factors*, U.S. Department of Transportation, Federal Railroad Administration, DOT-VNTSC-FRA-14-03, November 2014, p. 5, https://railroads.dot.gov/elibrary/trespass-event-risk-factors

Appendix A – State Railroad Safety Laws and General Orders

AUTHORITY	STATUTORY SPECIFIED TASKS (PARAPHRASED)	CPUC-GENERAL ORDERS
Pub. Util. Code Sec. 309.7 (a)	RSD is responsible for inspection, surveillance, and investigation of the rights-of-way, facilities, equipment, and operations of railroads and public mass transit guideways, and for enforcing state and federal laws, regulations, orders, and directives relating to transportation of persons or commodities, or both, of any nature or description by rail. RSD shall advise the Commission on all matters relating to rail safety, and shall propose to the Commission rules, regulations, orders, and other measures necessary to reduce the dangers caused by unsafe conditions on the railroads of the state.	
Pub. Util. Code Sec. 309.7 (b)	RSD shall exercise all powers of investigation granted to the Commission, including rights to enter upon land or facilities, inspect books and records, and compel testimony. RSD shall employ sufficient federally certified inspectors to ensure at the time of inspection that railroad locomotives and equipment and facilities located in class I railroad yards in California are inspected not less frequently than every 120 days, and all main and branch line tracks are inspected not less frequently than every 12 months.	GO 22-B: Requires that railroads immediately furnish the Commission notification of all train collision and derailments resulting in loss of life or injury, all bridge failures, and all highway crossing accidents resulting in loss of life or injury.
Pub. Util. Code Sec. 309.7 (c)	RSD shall, with delegated CPUC attorneys, enforce safety laws, rules, regulations, and orders, and to collect fines and penalties resulting from the violation of any safety rule or regulation.	Resolution ROSB-002 established a civil penalty citation program for enforcing compliance with safety requirements for railroad carriers
Pub. Util. Code Sec. 309.7 (d)	(d) ROSB activities shall also be supported by the fees paid by railroad corporations. The activities of the division of the Commission responsible for consumer protection and safety that related to grade crossing protection shall be supported by funds appropriated from the State	

AUTHORITY	STATUTORY SPECIFIED TASKS (PARAPHRASED)	CPUC-GENERAL ORDERS
	Highway Account in the Public Transportation Fund.	
Pub. Util. Code Sec. 315	The Commission shall investigate the cause of all accidents occurring within this state upon the property of any public utility or directly or indirectly arising from or connected with its maintenance or operation, resulting in loss of life or injury to person or property and requiring, in the judgment of the Commission, investigation by it, and may make such order or recommendation with respect thereto as in its judgment seems just and reasonable.	
Pub. Util. Code Sec. 421	(a)-(g) The Commission shall annually determine a fee and is permitted to expend funds for specified purposes.	
Pub. Util. Code Sec. 761	Whenever the Commission finds that rules, practices, equipment, appliances, facilities, or service of any public utility are unjust, unreasonable, unsafe, improper, inadequate, or insufficient, the Commission shall fix the rules.	GO 27-B: Filing and posting of railroad timetables and changes.
Pub. Util. Code Sec. 765.5	(a) The purpose of this section is to provide that the Commission takes all appropriate action necessary to ensure the safe operation of railroads in this state. (b) The Commission shall dedicate sufficient resources necessary to adequately carry out the State Participation Program for the regulation of rail transportation of hazardous materials as authorized by the Hazardous Material Transportation Uniform Safety Act of 1990 (P.L. 101-615). (c) On or before July 1, 1992, the Commission shall hire a minimum of six additional rail inspectors who are or shall become federally certified, consisting of three additional motive power and equipment inspectors, two signal inspectors, and one operating practices inspector, for the purpose of enforcing compliance by railroads operating in this state with state and federal safety regulations. (d) On or before July 1, 1992, the Commission shall establish, by regulation, a minimum	

AUTHORITY	STATUTORY SPECIFIED TASKS (PARAPHRASED)	CPUC-GENERAL ORDERS
	inspection standard to ensure, at the time of inspection, that railroad locomotives, equipment, and facilities located in class I railroad yards in California will be inspected not less frequently than every 120 days, and inspection of all branch and main line track not less frequently than every 12 months. (e) Commencing July 1, 2008, in addition to the minimum inspections undertaken pursuant to subdivision (d), the Commission shall conduct focused inspections of railroad yards and track, either in coordination with the Federal Railroad Administration, or as the Commission determines to be necessary. The focused inspection program shall target railroad yards and track that pose the greatest safety risk, based on inspection data, accident history, and rail traffic density.	
Pub. Util. Code Sec. 768	The Commission may, after a hearing, require every public utility to construct, maintain, and operate its line, plant, system, equipment, apparatus, tracks, and premises in a manner so as to promote and safeguard the health and safety of its employees, passengers, customers, and the public. The Commission may prescribe, among other things, the installation, use, maintenance, and operation of appropriate safety or other devices or appliances, including interlocking and other protective devices at grade crossings or junctions and block or other systems of signaling. The Commission may establish uniform or other standards of construction and equipment and require the performance of any other act which the health or safety of its employees, passengers, customers, or the public may demand.	GO 26-D: Establishes minimum clearances between railroad tracks, parallel tracks, side clearances, overhead clearances, freight car clearances, and clearances for obstructions, motor vehicles, and warning devices to prevent injuries and fatalities to rail employees. GO 72-B: Formulates uniform standards for grade crossing construction to increase public safety. GO 75-D: Establishes uniform standards for warning devices for at-grade crossings to reduce hazards associated with persons traversing at-grade crossings. GO 118-A: Provides standards for the construction, reconstruction, and maintenance of walkways adjacent to railroad tracks to provide a safe area for train crews to work. GO 126: Establishes requirements for the contents of First-Aid kits provided by common carrier railroads.

AUTHORITY	STATUTORY SPECIFIED TASKS (PARAPHRASED)	CPUC-GENERAL ORDERS
Pub. Util. Code Sec. 916	Requires the Commission to report to the Legislature on its rail safety activities annually, on or before November 30.	
Pub. Util. Code Sec. 916.2	Requires the Commission to report to the Legislature on sites on railroad lines in the state it finds to be hazardous and list all derailment accidents sites in the state on which accidents have occurred within at least the previous five years.	
Pub. Util. Code Sec. 916.3	Requires the Commission to report on the actions CPUC has taken to comply with section 765.5, which requires CPUC to take all appropriate action necessary to ensure the safe operation of railroads in this state. Requires the Commission to report annually on the impact on competition, if any, of the regulatory fees assessed railroad corporations for the support of CPUC's activities.	
Pub. Util. Code Sec. 7661	Requires the Commission to investigate any incident that results in a notification to CEMA [now Cal OES].	
Pub. Util. Code Sec. 7662	Requires a railroad to place appropriate signage to notify an engineer of an approaching grade crossing and establishes standards for the posting of signage and flags, milepost markers, and permanent speed signs.	
Pub. Util. Code Sec. 7665.2	By July 1, 2007, requires every operator of rail facilities to provide a risk assessment to the Commission and the agency for each rail facility in the state that is under its ownership, operation, or control, and prescribes the elements of the risk assessment.	
Pub. Util. Code Sec 7665.4	(f) Requires the rail operators to develop an infrastructure protection program and requires the Commission to review the infrastructure protection program submitted by a rail operator. Permits CPUC to conduct inspections to facilitate the review and permits CPUC to order a rail operator to improve, modify, or change its	

AUTHORITY	STATUTORY SPECIFIED TASKS (PARAPHRASED)	CPUC-GENERAL ORDERS
	program to comply with the requirements of this article. (g) Permits CPUC to fine a rail operator for failure to comply with the requirements of this section or an order of the Commission pursuant to this section.	
Pub. Util. Code Sec. 7665.6	Requires every rail operator to secure all facilities that handle or store hazardous materials; store hazardous materials only in secure facilities; ensure that the cabs of occupied locomotives are secured from hijacking, sabotage, or terrorism; and secure remote-control devices. Prohibits every rail operator from leaving locomotive equipment running while unattended or unlocked, from using remote control locomotives to move hazardous materials over a public crossing, unless under specified circumstances.	GO 161: Establishes safety standards for the rail transportation of hazardous materials.
Pub. Util. Code Sec. 7665.8	Requires every rail operator to provide communications capability to timely alert law enforcement officers, bridge tenders, and rail workers of the local or national threat level for the rail industry, i.e., sabotage, terrorism, or other crimes.	
Pub. Util. Code Sec. 7673	Requires every railroad that transports hazardous materials to provide a system map showing mileposts, stations, terminals, junction points, road crossings, and location of pipelines in its rights of way.	
Pub. Util. Code Sec. 916.2 [formerly Sec. 7711]	Requires CPUC to identify local safety hazards on California railroads	
Pub. Util. Code Sec. 7711.1	Requires CPUC to collect and analyze near-miss data.	

Appendix B – Examples of Regular Inspections

February 14, 2024: RSD staff performed an inspection of newly constructed industry tracks at the Home Depot distribution facility in Perris. The initial inspection aimed to identify walkway safety issues that had been reported to the CPUC. During the inspection, it was discovered that the walkways adjacent to the tracks leading into the facility were not compliant with CPUC General Order (GO) 118-A, which requires walkways provide a reasonable and regular surface 8'6" measured from the center line of the track where train crews regularly work.

In addition, it was discovered that the public grade crossing located on East Ellis Ave. that services the facility did not comply with GO 75-D, which requires the correct warning devices (Standard 1-R) and Emergency Notification Signs (ENS). The ENS signs were missing, and the posts for the warning devices were not retroreflectorized.

On Standard 1-R devices, the posts must contain the following items;

- The device must have Crossbucks.
- Number of railroad tracks at the crossing.
- An ENS sign located in conspicous location. The required ENS signs shall have an emergency phone number and the DOT number identifying the grade crossing.
- Device posts must be reflectorized on both sides .

The inspector later discovered that the grade crossing did not have a CPUC or a DOT number assigned. All railroad crossings in California are required to have a designated CPUC and a DOT number. After notification by the inspectors the crossing was closed to public access.

A CPUC General Order Inspection Report (GOIN) was written and submitted to the railroad and the shipper documenting the non-compliant conditions.

After the initial notification to both the Railroad and Home Depot management, RSD inspectors conducted multiple follow-up visits with Home Depot manangement, construction design consultants, and the company in charge of the facility construction.

On December 1, 2024, RSD was advised of completion, and on **December 2, 2024**, an RSD inspector performed an inspection of the tracks with Railroad management and Home Depot contractors. The inspector determined that all defects were brought into compliance and that the corrections satisfied GO 118-A.

CPUC and DOT numbers were assigned to the E. Ellis Ave. grade crossing, and the proper Standard 1-R safety devices were brought into compliance of GO 75-D.

Before: Home Depot track showing incorrect walkway. (118-A) **After:** Walkway slope corrected.

Before: Home Depot tracks detailing a V-ditch between tracks. **After:** Walkway with V-ditch filled with walkway ballast.

Before: Crossing missing ENS sign, and post not reflectorized.

After: With added ENS sign and reflectorized post.

August 8, 2024: A team of RSD investigators conducted an inspection of Amtrak passenger equipment in Los Angeles.

The purpose of the inspection was to audit the condition of the trains that Amtrak deemed ready for service. Amtrak is required to adhere to 49 CFR 231 Railroad Safety Appliance Standards, 49 CFR 238 Passenger Equipment Safety Standards, and 49 CFR 239 Passenger Train Emergency Preparedness. An inspection of door testing procedures was conducted, which includes demonstration of side passenger door obstruction censors and a side door manual override test. The manual override is intended for use in case of an emergency in the event of a loss of power.

The inspection included six passenger cars and two locomotives with six non-compliant conditions identified, with two examples as follows:

A securement bolt was missing from a sill step on a passenger car, causing the step to be loose. This does not comply with 49 CFR 231.14 (e)(4)(ii), which requires that sill steps must all be securely fastened. A sill step is a step mounted on the exterior of the rail car used by railroad employees to mount and dismount from the car. The risk represented by a crew member stepping on a loose sill step can cause them to slip and fall, resulting in an injury or fatality.

An electrical door panel was left open and unsecured, exposing high voltage equipment. This is non-compliant with 49 CFR 238.117, which requires that high voltage equipment on passenger rail cars shall be appropriately equipped with interlocks or guards to minimize the risk of personal injury. An unsecured panel can result in electrical injury to passengers and railroad employees.

RSD staff immediately notified Amtrak management of the non-compliant conditions. Amtrak corrected the defective conditions before the train departed.

A federal inspection report was issued to the railroad documenting the non-compliant conditions.

Sill step loose, securement bolt missing.

Electrical door panel left open exposing high voltage

August 22, 2024: An RSD inspector performed a track inspection of the Union Pacific (UPRR) Brea Chem Industrial Lead in Brea. At the time of the inspection a train crew was working in the area.

The inspector identified a 48-inch vertical split head in the rail, which is not in compliance with 49 CFR 213.113 (c)(16), which defines a vertical split head as a "vertical split through or near the middle of the head, and extending into or through it". This type of defect consists of a crack forming internally in the head of the rail and running vertically and longitudinally sometimes the entire length only emerging when the weight of the rail cars forces the head to split. A vertical split

head is difficult for crews to see since the crack is internal and often doesn't surface until an incident occurs. If undetected, a vertical split head can cause a derailment.

The inspector immediately notified UPPR management of the non-compliant condition, and the track was immediately removed from service. UPRR track employees made repairs, bringing the track back into compliance.

The inspector submitted a federal inspection report to the railroad which documented the non-compliant condition.

Rail with 48" Vertical Split Head

March 6, 2025: RSD inspectors performed an inspection of Metrolink highway-rail grade crossings from San Bernardino to Redlands.

Prior to the inspection, a safety briefing was held. Inspectors were reminded that permission from the dispatcher, referred to as "Track and Time", would be required before occupying any tracks.

Following the briefing, a railroad employee obtained Track and Time permission to occupy the track between Control Point (CP) Richardson and CP Zumo. All railroad employees acknowledged the stated limits of the Track and Time during the briefing.

During testing, a Metrolink employee placed a shunt on the track. The dispatcher immediately notified the Metrolink employees that they were outside their authorized limits. After notification, all personnel were instructed to be clear of the track and all work was immediately stopped.

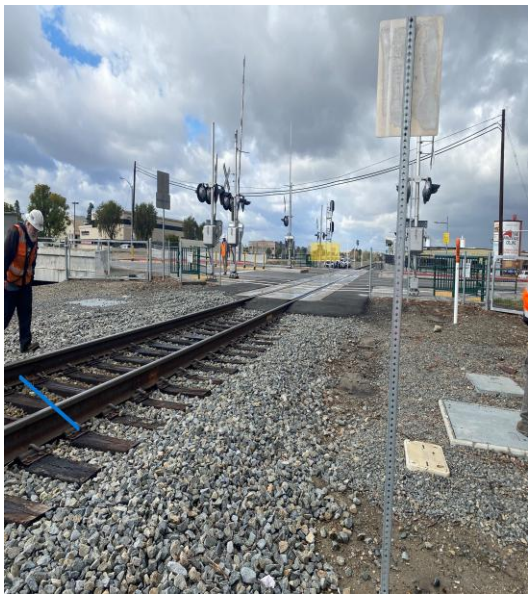
The RSD inspector notified Metrolink that the incident did not comply with 49 CFR 214.313 – Responsibility of Individual Roadway Workers, which requires that roadway workers ascertain that provision is made for on-track safety prior to occupying the track.

In response, Metrolink immediately shut down all testing operations for the employees involved and launched an internal investigation. Recognizing the severity of the incident and the potential for serious consequences, the following corrective actions were taken:

- The employees involved were re-trained and re-qualified on the specific territory.
- Additional Track and Time procedure tools and safeguards were introduced.

The RSD inspector submitted a federal report documenting the non-compliant condition with a recommendation for civil penalty.

Blue line is the location where shunt was placed, behind the signal. Outside limits.



Blue line is location where the shunt was placed, the highlight is the signal.

Yellow indicates authorized Track and Time, the red star indicates where shunt was placed.

May 7, 2025: An RSD inspector performed an inspection of the California Northern Railroad (CFNR) between Zamora and Willows. While inspecting the siding track at Zamora, the inspector observed a CFNR customer's staff working near the main line track while preparing railcars for shipment.

At one point the employees were observed standing on the main line track with ladders against the side of rail cars on the siding track, and the ladder legs were butted up against a main line track. There were also ropes and other items lying on the track. The RSD inspector immediately reported this unsafe practice to the CFNR Trainmaster. The Trainmaster then contacted the railroad customer and instructed them to stop all activities and clear the tracks at Zamora. An approaching train on the main line track was contacted informing them of the hazardous situation, which allowed the train crew to stop prior to reaching the location.

The quick reaction of the RSD inspector prevented a certain collision between the oncoming train and the individuals on the tracks.

Individuals on the track with ladders while securing tarps.

Individual on a ladder on the track, while others stand on the track.

Appendix C – Example of a Focused Inspection

July 31, 2024: Railroad Safety Division (RSD) Inspectors specializing in hazardous materials performed a focused inspection at the California Northern (CFNR) rail yard in American Canyon and the CFNR storage track in Cordelia.

The focus was the inspection of rail cars transporting hazardous materials as specified in the Code of Federal Regulations (CFR), for leaks, closures, proper markings, labeling, placarding, and other items pertaining to the safe transportation of hazardous materials by rail.

At the CFNR rail yard in American Canyon, four tank cars transporting Liquefied Petroleum Gas (LPG) were inspected. The Inspectors identified multiple non-compliant conditions, of which two examples are listed below.

A Vapor Line plug was dislodged on one of the tank cars, not in compliance with 49 CFR 173.31 (d)(1)(iv), which requires that all closures on tank cars are secured and properly tightened. If the Vapor Line is not tightly closed it can potentially result in the release of hazardous materials into the environment, putting railway workers and the public at risk of injury or fatality.

On another tank car, the protective housing had the securement pin disconnected and broken from its safety chain. This was not in compliance with 49 CFR 173.31 (d)(1)(v), which requires that the protective housing be properly secured. When housing is not secured properly it can expose the valves to damage resulting in the release of hazardous materials.

At the CFNR siding in Cordelia, eighteen tank cars transporting Liquefied Petroleum Gas (LPG) were inspected. The Inspectors identified multiple non-compliant conditions, with an example listed below.

A placard holder was found broken on a tank car, not in compliance with 49 CFR 172.516 (c)(1) which requires that placards be securely attached or affixed to the rail car. The risk of non-compliance is that in the event of an emergency, first responders will not be able to determine the contents loaded in the rail car.

A tank car loaded with LPG had a defective Sample Line Valve and was leaking product, not in compliance with 49 CFR 173.31 (d)(1)(iv), which requires that all closures on tank cars are secured and properly tightened. The Inspectors immediately notified CFNR management and ensured that the valve was tightened to stop the leak.

The defective car originated from Sheldon United in Suisun. The Inspectors met with the Regional Safety Supervisor of Sheldon United the following week to discuss the findings and review the Standard Operating Practices for their operating employees.

The Inspectors submitted federal reports to the railroad and shippers, issuing defects that documented the non-compliant conditions. All non-compliant conditions were corrected before the cars were released for transportation.

Inspecting housing domes at CFNR

Missing plug on liquid line valve

Defective sample line valve creating a leak

Broken placard holder

Appendix D – Example of an Accident Investigation

December 30, 2024: A BNSF freight train derailed at approximately 4:54 p.m. near Keene which is located 12 miles northwest of Tehachapi. The train was operated by a three-person crew and consisted of 8 locomotives and 108 rail cars. The train was traveling at approximately 21 mph when it experienced an emergency train air brake application, causing the train to stop. A train crew member walked back to determine the cause of the emergency stop and observed that nine rail cars had derailed and were on their sides. The train crew member then notified the train dispatcher.

The accident occurred on the main track and caused a 14-hour service interruption. No injuries to employees or hazardous material leaks were reported. All nine derailed cars and the track were damaged.

RSD inspectors were notified by an Office of Emergency Services report on the day of the derailment. RSD inspectors visited the site, inspected the track and train consist, relevant inspection records, and reviewed locomotive event recorder data. No regulatory non-compliance was noted by RSD inspectors. The investigation determined that there was a malfunction in the train's air brake system that caused the derailment. The malfunction caused the brakes on the rear portion of the train to apply while the head end of the train was pulling, causing the cars to derail while traveling through a curve. The failure happened enroute, and BNSF repaired the air brakes after the incident.

Rail cars lying on their sides after derailing

Derailed rail cars pulled away to clear the main track

Appendix E – Example of RSD Response to Encampments Adjacent to Railroads

February 4, 2025: Rail Safety Division (RSD) inspectors identified an encampment situated on BNSF Railway property in Pico Rivera. The inspection revealed multiple safety hazards associated with the encampment and surrounding debris.

The occupants had constructed a makeshift tent using old railroad ties as structural supports within the rail yard. Additionally, wood, metal, and various debris were scattered throughout designated walkways used by railroad personnel, creating unsafe conditions and violations of General Order 118-A. Inspectors also observed individuals from the encampment trespassing on or near active railroad tracks, presenting serious safety risks to both the trespassers and railroad employees.

RSD staff promptly notified BNSF management of these conditions and issued a General Order Inspection Report identifying the observed non-compliances with GO 118-A. The situation was also reported to BNSF Police, who are responsible for managing the safe removal of trespassers and encampments from rail property.

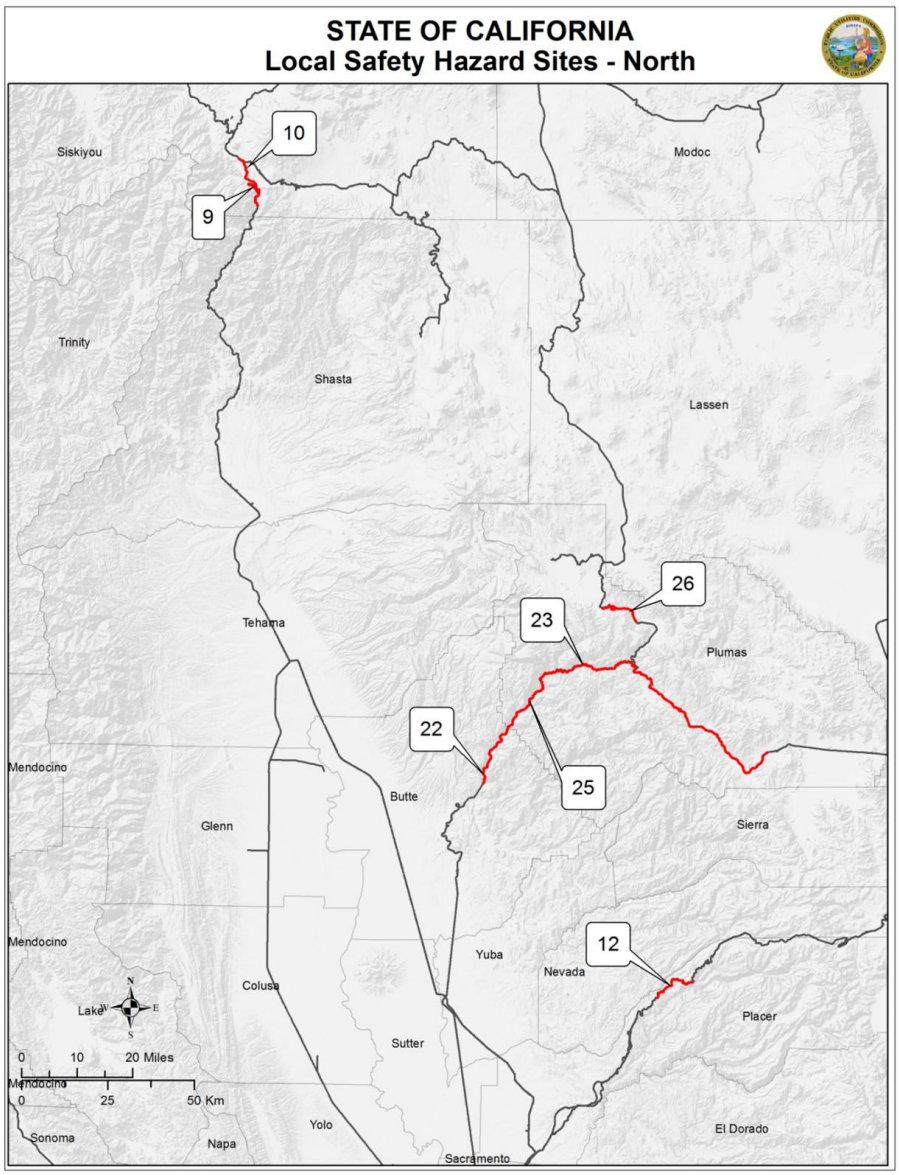
Within one week of notification, BNSF removed the encampment and cleared the associated debris. February 20, 2025: RSD inspectors conducted a follow-up inspection and confirmed that the encampment and all related debris had been removed from the property. Walkways were cleared and brought back into compliance with General Order 118-A.

Before: Encampment adjacent to BNSF tracks.

After: Encampment removed.

Appendix F – Local Safety Hazard Site Maps

Local Safety Hazard Sites are shown below in three areas: 1) Northern California, 2) California Central Coast/Desert Valley, and 3) Southern California. The map numbers correspond to the list of Local Safety Hazard Sites presented in Chapter IV. Sites #7 and #27 are not shown.




STATE OF CALIFORNIA
Local Safety Hazard Sites - Central
Inyo
San Benito
Fresno
Tulare
Kings
Monterey
San Luis Obispo
1
Kern
16
Santa Barbara
Ventura
Los Angeles
N
W
E
S
0 10 20 Miles
0 25 50 Km


STATE OF CALIFORNIA
Local Safety Hazard Sites - South
Kern
San Bernardino
Los Angeles
28
30
19
29
6
4
3
Riverside
Orange
San Diego
Imperial
31
N
W
E
S
0 10 20 Miles
0 25 50 Km

Appendix G - List of Abbreviations

ACE	Altamont Corridor Express
ATK	Amtrak
BNSF	BNSF Railway
CFR	Code of Federal Regulations
CHSRA	California High Speed Rail Authority
CORT	Crude Oil Reconnaissance Team
CPUC	California Public Utilities Commission
FRA	Federal Railroad Administration
GO	General Order
GOIN	General Order Notification Process
GOTP	General Order Training Program
HGAP	Heavy Grade Audit Project
HSR	High Speed Rail
LPG	Liquefied Petroleum Gas
LSHS	Local Safety Hazard Site
mph	Miles per hour
OES	Office of Emergency Services
OLI	Operation Lifesaver
PCMZ	Caltrain
PTC	Positive Train Control
Pub. Util. Code	California Public Utilities Code
RBEP	Railroad Bridge Evaluation Project

RHWP	Railroad Head Wear Project
RMSR	Risk Management Status Report
ROSB	Railroad Operations and Safety Branch
ROW	Right of Way
RSD	Rail Safety Division
RTEP	Railroad Tunnel Evaluation Project
SCAX	Metrolink
SDNX	North County Transit District
SMART	Sonoma-Marin Area Rail Transit
UPRR or UP	Union Pacific Railroad